

Portland State University PDXScholar

School District Enrollment Forecast Reports

Population Research Center

6-1-2009

Oregon City School District Enrollment Forecast Update, 2009-10 to 2013-14

Portland State University. Population Research Center

Charles Rynerson

Portland State University, rynerson@pdx.edu

Vivian Siu

Portland State University

Let us know how access to this document benefits you.

Follow this and additional works at: <http://pdxscholar.library.pdx.edu/enrollmentforecasts>

 Part of the [Urban Studies and Planning Commons](#)

Recommended Citation

Portland State University. Population Research Center; Rynerson, Charles; and Siu, Vivian, "Oregon City School District Enrollment Forecast Update, 2009-10 to 2013-14" (2009). *School District Enrollment Forecast Reports*. Paper 50.
<http://pdxscholar.library.pdx.edu/enrollmentforecasts/50>

This Technical Report is brought to you for free and open access. It has been accepted for inclusion in School District Enrollment Forecast Reports by an authorized administrator of PDXScholar. For more information, please contact pdxscholar@pdx.edu.

**OREGON CITY SCHOOL DISTRICT
ENROLLMENT FORECAST UPDATE
2009-10 TO 2013-14**



Portland State
UNIVERSITY

Population Research
Center



JUNE, 2009

**OREGON CITY SCHOOL DISTRICT
ENROLLMENT FORECASTS
2009-10 TO 2013-14**

**Prepared By
Population Research Center
Portland State University**

Prepared by Population Research Center faculty and staff in the Nohad A. Toulan School of Urban Studies & Planning, College of Urban & Public Affairs at Portland State University. Charles Rynerson, principal investigator and author; Vivian Siu, database development and spatial and statistical analysis.

JUNE, 2009

CONTENTS

EXECUTIVE SUMMARY	1
District-wide Enrollment Forecast.....	3
Individual School Forecasts.....	3
Forecast Accuracy.....	4
INTRODUCTION	5
POPULATION AND HOUSING TRENDS, 1990 to 2008	7
Population by Age Group	10
Births and Fertility Rates	13
Housing Growth and Characteristics	15
ENROLLMENT TRENDS	23
Private and Home School Enrollment.....	26
Neighboring Districts.....	28
District-wide Enrollment	29
Enrollment Trends at Individual Schools	31
HOUSING DEVELOPMENT AND STUDENT GENERATION	33
ENROLLMENT FORECASTS.....	37
District-wide Enrollment Forecast.....	37
Individual School Forecasts.....	42
FORECAST ERROR AND UNCERTAINTY.....	45
APPENDIX: POPULATION, HOUSING, AND ENROLLMENT PROFILES FOR INDIVIDUAL SCHOOLS.....	

TABLES AND CHARTS

Table 1. Historic and Forecast Enrollment, Oregon City School District.....	2
Table 2. City and Region Population, 1990, 2000, and 2008.....	7
Table 3. Where OCSD Residents are Employed.....	9
Table 4. Population by Age Group, Oregon City School District, 1990 and 2000.....	10
Table 5. Annual Births, 1990 to 2007, Oregon City School District.....	13
Table 6. OCSD, Housing and Household Characteristics, 1990 and 2000.....	15
Table 7. Housing Units Authorized by Building Permits, City of Oregon City.....	16
Table 8. OCSD, Single Family Homes Built 2000 to 2007 by Attendance Area.....	17
Table 9. Single Family Subdivisions, OCSD, 2005 to 2008.....	19
Table 10. Multiple Family Developments, OCSD, 2005 to 2008.....	21
Table 11. Oregon City Students in Gladstone Schools and Charter Schools.....	25
Table 12. Inter-District Transfers.....	26
Table 13. Home School Students Residing in OCSD.....	27

TABLES AND CHARTS (continued)

Table 14. Selected School Districts, Demographic and Enrollment Highlights.....	28
Table 15. Oregon City S.D., Enrollment History, 2003-04 to 2008-09.....	30
Table 16. Enrollment History for Individual Schools, 2003-04 to 2008-09.....	32
Table 17. OCSD Students per Single Family Home, Homes Built 2000 to 2007.....	34
Table 18. OCSD Students per Single Family Home, Homes Built 1990 to 1999.....	34
Table 19. Grade Progression Rates, Oregon City S.D., Historic and Forecast.....	39
Table 20. OCSD, Enrollment History and Forecasts, 2003-04 to 2013-14.....	41
Table 21. Enrollment Forecasts for Individual Schools, 2008-09 to 2013-14.....	44
Table 22. Fall 2008 Enrollment Compared to Previous Forecasts by Grade Level....	46
Table 23. Fall 2008 Enrollment Compared to Previous Forecasts by School.....	47
Chart 1. Population Change Due to Migration, 1990 to 2000, OCSD by Age Group.....	11
Chart 2. 2000 Census Population by Single Year of Age, Oregon City S.D.....	12
Chart 3a. Age-Specific Fertility Rates, 2000, OCSD, Clackamas Co. & Oregon.....	14
Chart 3b. Age-Specific Fertility Rates, 1990 and 2000, Oregon City School District....	14
Chart 4. Enrollment by Grade Level, 1998-99, 2003-04, and 2008-09, OCSD.....	22
Chart 5. OCSD Students per Single Family Home, Fall 2008.....	35
Chart 6. Oregon City S. D. Kindergarten Enrollment and Birth Cohorts.....	37
Map 1. Place of Work of OCSD Area Residents, 2006.....	8

EXECUTIVE SUMMARY

This report presents the results of a demographic study conducted by the Portland State University Population Research Center (PRC). The study includes analysis of population, housing and enrollment trends affecting the District in recent years and forecasts of district-wide and individual school enrollments for the 2009-10 to 2013-14 school years.

The Oregon City School District (OCSD) enrolled 7,635 students in Fall 2008, a decrease of 77 students (1.0 percent) from Fall 2007. This was the fourth consecutive year of declining K-12 enrollment, following seven years of enrollment gains. In spite of the overall loss, more students were enrolled in District's kindergarten and 1st grade classes in Fall 2008 than in Fall 2007. While total elementary (K-6) and middle school (7-8) enrollments declined, high school enrollment was essentially unchanged from Fall 2007 to Fall 2008.

The recent enrollment declines have occurred in spite of an increasing number of students living in new homes. About 1,300 OCSD students live in single family homes built since 2000, but OCSD enrollment has only increased by about 300 students during the period. An aging population and lower fertility rates contribute to this scenario. Also, the OCSD enrollment figures do not include enrollment at the District's three charter schools, recently opened in 2006 and 2007.

Overall K-12 enrollment is forecast to decline by 113 students in the next five years. New housing will likely contribute relatively few students to the District in the next year or two due to the housing slowdown. However, many new building lots exist in platted and approved subdivisions, so prospects are good for renewed housing growth within the five year horizon of these forecasts. Beyond that, sustained new development is less certain, because voters have denied large annexations in urban growth boundary expansion areas.

Table 1 contains the Oregon City School District's recent and forecast enrollments for one year and five year intervals. Following the table are brief highlights of the district-wide and individual school enrollment forecasts.

Table 1 Historic and Forecast Enrollment Oregon City School District			
<i>One Year Trend</i>			
	Actual		Forecast
	2007-08	2008-09	2009-10
Grades K-6	4,247	4,209	4,147
<i>Change</i>		-38 -0.9%	-62 -1.5%
Grades 7-8	1,243	1,195	1,205
<i>Change</i>		-48 -3.9%	10 0.8%
Grades 9-12	2,222	2,231	2,224
<i>Change</i>		9 0.4%	-7 -0.3%
Total	7,712	7,635	7,576
<i>Change</i>		-77 -1.0%	-59 -0.8%
<i>Five Year Trend</i>			
	Actual		Forecast
	2003-04	2008-09	2013-14
Grades K-6	4,359	4,209	4,087
<i>Change</i>		-150 -3%	-122 -3%
Grades 7-8	1,320	1,195	1,168
<i>Change</i>		-125 -9%	-27 -2%
Grades 9-12	2,249	2,231	2,267
<i>Change</i>		-18 -1%	36 2%
Total	7,928	7,635	7,522
<i>Change</i>		-293 -4%	-113 -1%
<i>Actual: Oregon City School District, September 30 quarterly report information. Does not include charter schools.</i> <i>Forecast: Population Research Center, PSU, May 2009.</i>			

District-wide Enrollment Forecast

- Over the entire five year forecast period, K-12 enrollment is forecast to decrease by 113 students, a drop of 1.5 percent.
- The kindergarten class size is forecast to remain close to or below the Fall 2008 enrollment of 545 students, reflecting the relatively low number of births to District residents between 2003 and 2006.
- The enrollment decline is concentrated at the K-6 level. Elementary enrollment is forecast to decrease by 122 students (three percent) during the five year period.
- Middle school (7-8) enrollment is forecast to decrease by 27 students (two percent).
- Enrollment in high school (9-12) is forecast to increase by 36 students (two percent).

Individual School Forecasts

Forecasts for individual schools depict what future enrollments might be if current boundaries, grade configurations, and programs remain unchanged. Specific figures may be found in Table 21 of this report and in school profiles in the Appendix.

Highlights of the individual school forecasts include:

- Increased enrollment between 2008-09 and 2013-14 is forecast at Holcomb (38 students, or eight percent).
- Enrollments in 2013-14 are expected to be within two percent of 2008-09 enrollments at Beaver Creek, Gaffney Lane, Jennings Lodge, John McLoughlin, and Mt. Pleasant. However, enrollments in interim years will experience greater fluctuation.

- Enrollment declines of 18 to 55 students are forecast at Candy Lane, King, Park Place, and Redland.
- Both of the District's Middle Schools have wide enrollment fluctuations from year to year depending on the sizes of incoming and outgoing classes. In general, both Gardiner and Ogden gain enrollment between 2008-09 and 2011-12 and lose enrollment between 2011-12 and 2013-14, with forecast 2013-14 enrollments near or slightly below their 2008-09 enrollments.
- Oregon City High School is forecast to have relatively stable enrollment, decreasing by about 70 students over the next two years, and then gaining 100 students between 2010-11 and 2013-14.

Forecast Accuracy

This is the third consecutive year that PRC has produced forecasts for the OCSD and its schools. Previous district-wide forecasts have been very accurate, with total K-12 forecasts within one half of one percent of actual enrollments and forecasts for most individual grades within two percent over a one year horizon and three percent over a two year horizon. On the other hand, forecast errors for individual schools are relatively large in some cases. The difference between the one year forecast and actual Fall 2008 enrollments was less than five percent at nine of the District's 13 schools. However, the largest errors measured for individual school forecast were nine percent over a one year horizon and 12 percent over a two year horizon. These forecast errors are presented in Tables 22 and 23.

INTRODUCTION

For the third consecutive year the Portland State University Population Research Center (PRC) has prepared enrollment forecasts for the Oregon City School District (OCSD). This study integrates information about OCSD enrollment trends with local area population, housing, and economic trends, and includes forecasts of district-wide enrollment by grade level and total enrollment for individual schools. Information sources include the U.S. Census Bureau, birth data from the Oregon Center for Health Statistics, city and county population estimates produced by PRC, county population forecasts from the Oregon Office of Economic Analysis, employment trends and forecasts from the Oregon Employment Department, housing development data from the city and county and personal contact with local officials.

The District serves the entire city of Oregon City, a few blocks in the City of Gladstone, and portions of unincorporated Clackamas County, notably the Jennings Lodge community north of Gladstone and the Redland and Beavercreek communities east and southeast of Oregon City. Land use plans have recently been prepared for several hundred acres of unincorporated areas adjacent to the City of Oregon City that were added to the Urban Growth Boundary within the past several years. These areas are being incrementally annexed into the City and residential development within the area will contribute to OCSD enrollment in the long run, though the timing is uncertain.

Following this introduction are sections presenting recent population, housing, and enrollment trends within the District. Next are the results of the district-wide enrollment forecasts and individual school forecasts, and a description of the methodology we used to produce them. The final section contains a brief discussion of the nature and accuracy of forecasts, and an appendix contains a one page profile for each of the District's schools showing its enrollment history and forecasts, and housing trends within its attendance area.

POPULATION AND HOUSING TRENDS, 1990 to 2008

During the decade between 1990 and 2000, total population within the OCSD grew by 24 percent, from 38,908 persons to 48,167. Clackamas County grew by 21 percent overall, and the Portland metropolitan area grew by 27 percent. Although the area served by the OCSD grew at a slightly slower rate than the metro area, the City of Oregon City grew by 75 percent, adding about 11,000 residents in the decade. As a result of the growth in Oregon City and population loss in unincorporated areas, the share of the District's population living within the City of Oregon City grew from 38 percent in 1990 to 53 percent in 2000. Average annual growth rates have been lower in the 2000s than in the 1990s for all areas shown in Table 2 below, but once again the City of Oregon City's growth has outpaced the growth of Clackamas County and of the Portland area overall.

Table 2
City and Region Population, 1990, 2000, and 2008

	1990	2000	2008	Avg. Annual Growth Rate	
				1990-2000	2000-2008
City of Oregon City ¹	14,698	25,754	30,405	5.6%	2.0%
City of Gladstone	10,152	11,438	12,215	1.2%	0.8%
OCSD Portion ²	300	384	N/A	2.5%	
OCSD Total	38,908	48,167	N/A	2.1%	
OCSD Unincorporated	23,910	22,029	N/A	-0.8%	
Clackamas County	278,850	338,391	376,660	1.9%	1.3%
Portland-Vancouver-Beaverton MSA ³	1,523,741	1,927,881	2,191,785	2.4%	1.6%

1. A portion of the City of Oregon City's population growth was due to the annexation of 284 persons between 1990 and 2000 and 78 persons between 2000 and 2008.

2. The 1990 population of OCSD within Gladstone is an estimate because 1990 census blocks were not delineated by school district boundaries.

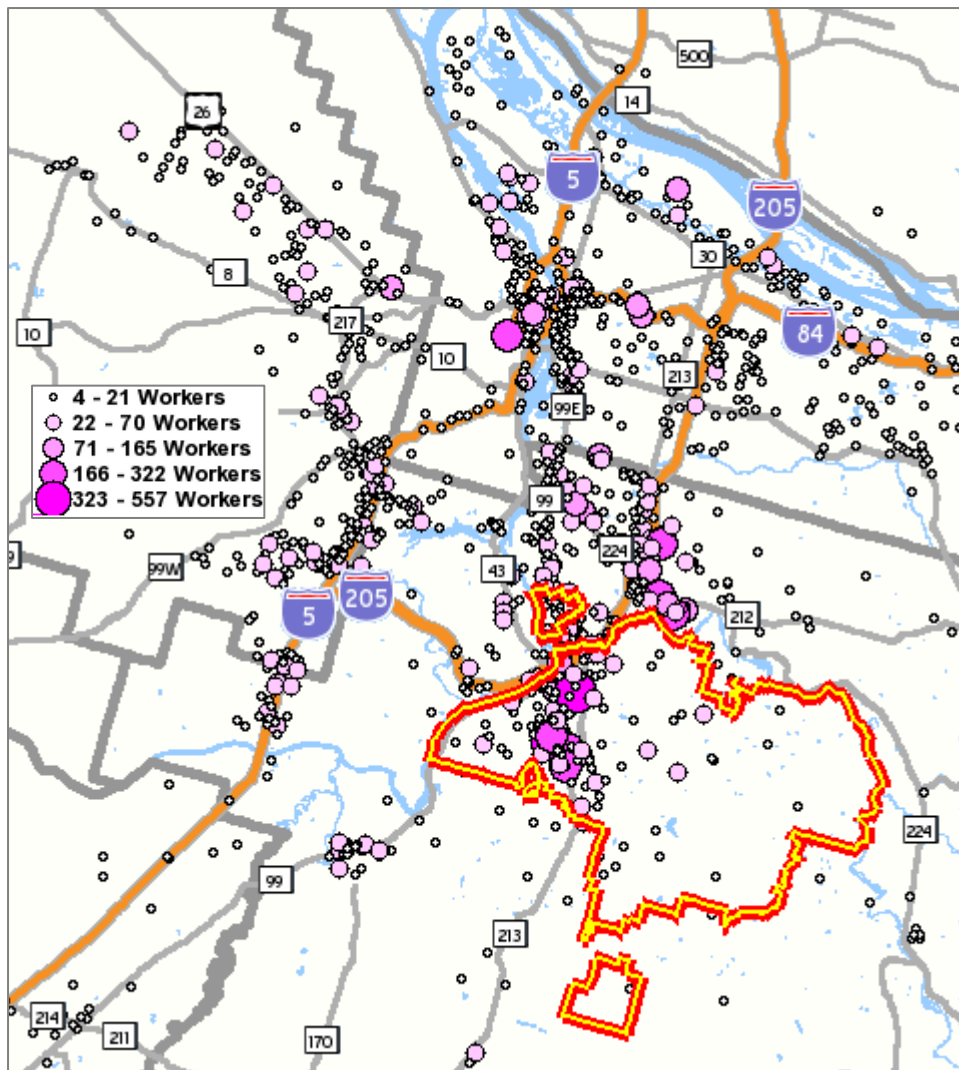
3. Portland-Vancouver-Beaverton MSA consists of Clackamas, Columbia, Multnomah, Washington, Yamhill (OR) and Clark and Skamania (WA) Counties.

Sources: U.S. Census Bureau, 1990 and 2000 censuses; "2008 Oregon Population Report." Portland State University Population Research Center.

The District is part of the Portland metropolitan area labor market, and most residents commute outside of the District to work, so population growth in the area depends to a

great extent on the strength of the metro area's economy. Recent data show that, among private sector workers residing in the OCSD, 46 percent worked in Clackamas County, primarily outside of the District itself. Another 31 percent worked in Multnomah County, and 14 percent worked in Washington County. Map 1 shows concentrations of OCSD residents working in the Clackamas Town Center area, the Highway 224 Corridor, Tigard and Wilsonville, Downtown and East Portland, and the Portland Airport. Table 3 from the same data source reports the number and share of all workers by place of work.¹

Map 1
Place of Work of OCSD Area Residents, 2006



¹U.S. Census Bureau, LED Origin-Destination Database (2nd quarter 2006). Commute shed report for residents of OCSD. Includes workers at firms covered by unemployment insurance (excludes most agricultural jobs and self-employed). Report and map created at <http://lehdmap3.did.census.gov/themap3/>.

Table 3
Where OCSD Residents Are Employed

Job Located Within*	Workers	Share
Clackamas County	10,852	46%
Oregon City School District	4,148	18%
City of Oregon City	3,454	15%
Multnomah County	7,256	31%
City of Portland	6,550	28%
Washington County	3,353	14%
Marion County	737	3%
All other locations	1,349	6%
Total Primary Jobs	23,547	100%

**Note: Indentation indicates that the area is also included within the area above it. For example, workers in the City of Oregon City are also counted in the Oregon City School District. Portions of the City of Portland are outside of Multnomah County, but few jobs are located in those areas.*

Source: US Census Bureau, LED Origin-Destination Data Base (2nd Quarter 2006). Jobs covered by unemployment insurance, generally excluding federal government, agricultural, self-employed and domestic workers. Includes at most one (primary) job per resident.

Between 2004 and 2007 Clackamas County added 12,200 jobs, nine percent over the three year period.² Near the end of 2007, the Oregon Employment Department summarized the County's robust employment growth:

“Clackamas is the metro's fastest growing county, fueled by an expanding population and strength in trade and professional and business services. Its manufacturing sector has bucked national and state trends by adding hundreds of jobs, thanks in part to ongoing demand in aerospace- and defense-related industries. As measured by nonfarm jobs, Clackamas represents 15 percent of Portland's economy and has accounted for nearly 30 percent of its recent job growth.”³

In hindsight, we know that employment in the U.S. and in Clackamas County was near its peak at about the time this statement was published. In the past year the County has lost 9,200 jobs (6.1 percent between May 2008 and May 2009), according to the Oregon Employment Department's most recent statistics. Clackamas County's unemployment rate rose from 4.6 percent in May 2008 (about one percentage point below the U.S. rate) to 11.2 percent in May 2009 (nearly two percentage points above the U.S. rate). The

²“Current Employment by Industry,” Oregon Employment Department, OLMIS. Average annual non-farm employment in Clackamas County was 135,900 in 2004 and 148,100 in 2007. May employment was 150,000 in 2008 and 140,800 in 2009.

³“Portland Metro Area: A Look at Recent Job Growth,” Oregon Employment Department, OLMIS, December 20, 2007.

Portland metro area's unemployment rate increase of 6.7 percentage points during that period was the biggest increase among the nation's large metro areas. Typically, when the Portland area's unemployment rate is higher than the U.S. rate, population growth slows as a result of fewer people moving to the region.

Population by Age Group

Population by age group for 1990 and 2000 is shown in Table 4. The smallest growth rates were for ages 30 to 34 (six percent) and ages 65 to 69 (four percent). Those groups lost population in the U.S. and in Oregon between 1990 and 2000 because the cohort age 30 to 34 in 2000 were born during the late 1960s "baby bust" that followed the "baby boom," and those 65 to 69 were born during the depression era of the early 1930s, when

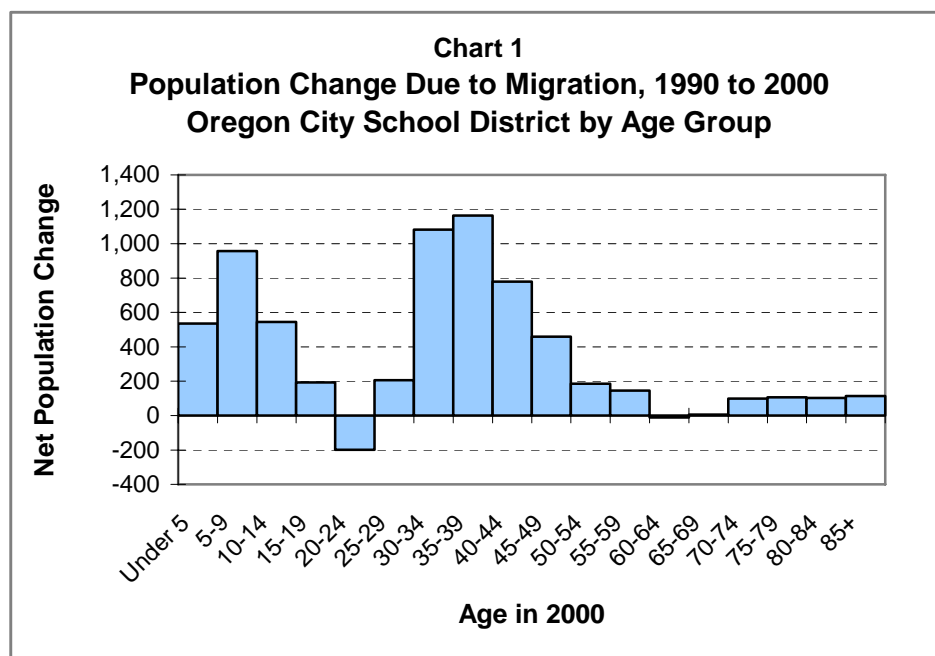
Table 4
Population by Age Group
Oregon City School District, 1990 and 2000

	1990	2000	1990 to 2000 Change	
			Number	Percent
Under Age 5	2,969	3,485	516	17%
Age 5 to 9	3,166	3,635	469	15%
Age 10 to 14	3,162	3,508	346	11%
Age 15 to 17	1,820	2,040	220	12%
Age 18 to 19	1,079	1,308	229	21%
Age 20 to 24	2,409	2,942	533	22%
Age 25 to 29	2,784	3,077	293	11%
Age 30 to 34	3,281	3,462	181	6%
Age 35 to 39	3,550	3,903	353	10%
Age 40 to 44	3,556	3,994	438	12%
Age 45 to 49	2,618	3,928	1,310	50%
Age 50 to 54	1,861	3,634	1,773	95%
Age 55 to 59	1,480	2,644	1,164	79%
Age 60 to 64	1,272	1,711	439	35%
Age 65 to 69	1,267	1,314	47	4%
Age 70 to 74	943	1,154	211	22%
Age 75 to 79	746	1,056	310	42%
Age 80 to 84	460	700	240	52%
Age 85 and over	485	672	187	39%
Total Population	38,908	48,167	9,259	24%
Total age 5 to 17	8,148	9,183	1,035	13%
share age 5 to 17	20.9%	19.1%		

Source: U.S. Census Bureau, 1990 and 2000 Censuses; data aggregated to OCSD boundary by Portland State University Population Research Center.

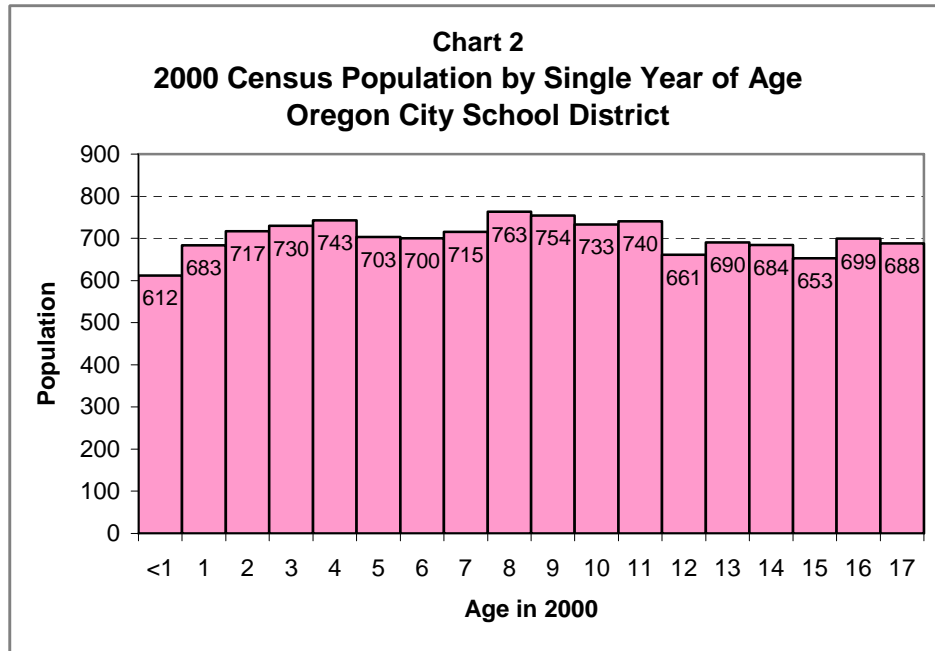
births also fell from previous levels. Numeric and percentage growth among the older adult population age 45 to 64 (4,686 persons, 65 percent) was significantly greater than for the school-age population age 5 to 17 (1,035 persons, 13 percent) and the younger adult population age 18 to 44 (2,027 persons, 12 percent).

By “surviving” the 1990 population and 1990s births (estimating the population in each age group that would survive to the year 2000) and comparing the “survived” population to the actual 2000 population by age group, we are able to estimate net migration by age cohort. Chart 1 shows the estimated population change that each age group contributed due to migration between 1990 and 2000. For example, for the cohort that was 10 to 14 in 1990 and 20 to 24 in 2000, about 200 more people moved out of the OCSD than into it in the 1990s. Conversely, migration flows contributed to a gain of over 2,000 people who were age 20 to 29 in 1990 and age 30 to 39 in 2000. Net losses due to migration for persons in their early 20s and gains for persons in their 30s are typical of suburban areas with a concentration of owner-occupied single family homes.



The age distribution of OCSD children counted in the 2000 Census is shown in Chart 2. The largest numbers of children were in preschool and elementary school ages, 2 to 11.

The smaller populations under age two may have foreshadowed the kindergarten enrollment declines of recent years.



Births and Fertility Rates

In the 2003 to 2007 period there was an average of 630 births each year to residents of the OCSD, about three percent lower than the 652 average annual births during the previous five year period (1998 to 2002) in spite of a growing population overall. This reflects an aging population as well as declining fertility rates. The number of OCSD births each year from 1990 to 2007 is reported in Table 5. In the “Enrollment Forecasts” section of this report we will examine the relationship between births, migration, and subsequent school enrollments.

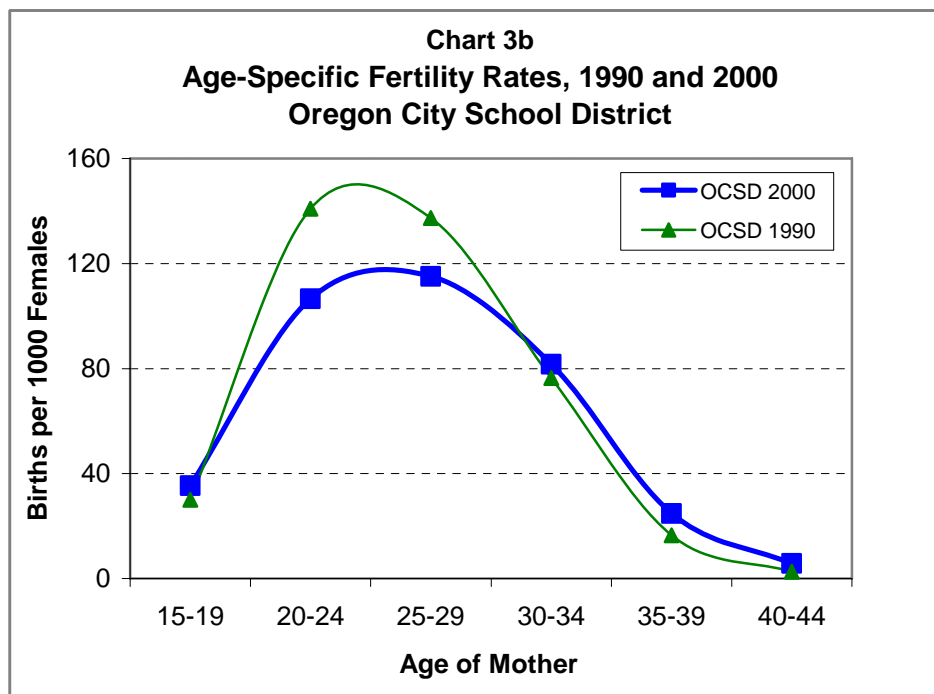
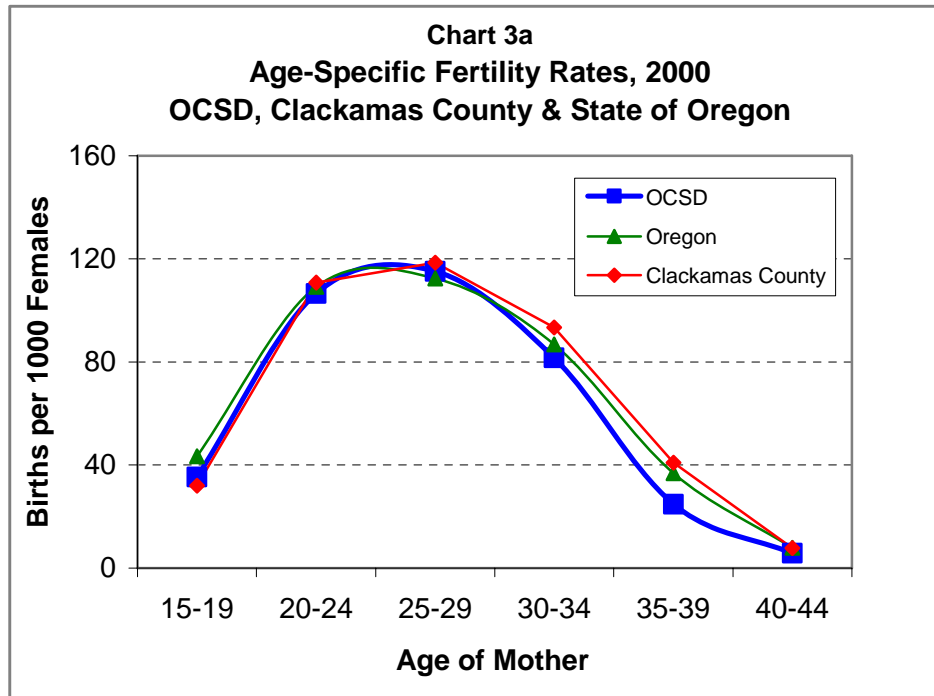
Table 5
Annual Births, 1990 to 2007
Oregon City School District

Year	Births
1990	642
1991	601
1992	596
1993	584
1994	598
1995	628
1996	683
1997	692
1998	672
1999	644
2000	651
2001	650
2002	645
2003	617
2004	641
2005	611
2006	629
2007	651

Source: PSU-PRC estimates using Oregon Center for Health Statistics zip code data and geocoded birth records.

Fertility rates for the OCSD are shown in Charts 3a and 3b on the next page. The rates were calculated for each age group by dividing the number of births in the calendar year by the female population counted in the census. For example, in 2000 there were 151 births to mothers age 20 to 24 and a population of 1,417 women age 20 to 24 in the OCSD, so the fertility rate in 2000 for women age 20 to 24 was $151 \div 1,417 = 0.107$

births per female or 107 births per thousand females. Chart 3a shows that rates for women under age 30 and over age 40 were nearly identical to Clackamas County and State of Oregon rates in 2000, but OCSD rates for women age 30 to 39 were slightly lower than the County and State rates.



In Oregon and Clackamas County between 1990 and 2000, fertility rates decreased for women under age 30 and increased for women age 30 and over. These trends were generally reflected in the OCSD birth rates, but as Chart 3b shows, the increases for women in their 30s were small compared with the decreases for women in their 20s.

Another common measure of fertility is the Total Fertility Rate (TFR). This is an estimate of the number of children that would be born to the average women during her child-bearing years, based on age-specific fertility rates observed at a given time. The TFR for the District was 1.85 in 2000, compared with 2.02 for Clackamas County overall, and 1.98 for the State. In 1990, the OCSD's TFR (2.02) was much closer to the County (2.07) and State (2.06) rates.

Housing Growth and Characteristics

During the 1990s, the number of housing units within the District's boundaries increased by about 4,500, as shown in Table 6 below. The smaller increase of 4,000 households

Table 6
Oregon City School District
Housing and Household Characteristics, 1990 and 2000

	1990	2000	1990 to 2000 Change	
			Number	Percent
Housing Units	14,042	18,588	4,546	32%
Single Family <i>share of total</i>	10,324 74%	12,521 67%	2,197	21%
Multiple Family <i>share of total</i>	2,471 18%	4,321 23%	1,850	75%
Mobile Home and Other <i>share of total</i>	1,247 9%	1,746 9%	499	40%
Households	13,656	17,663	4,007	29%
Households with children under 18 <i>share of total</i>	5,865 43%	6,739 38%	874	15%
Households with no children under 18 <i>share of total</i>	7,791 57%	10,924 62%	3,133	40%
Household Population	38,381	47,250	8,869	23%
Persons per Household	2.81	2.68	-0.14	-5%

Source: U.S. Census Bureau, 1990 and 2000 Censuses; data aggregated to OCSD boundary by Portland State University Population Research Center.

(occupied housing units) was due to an increase in vacancy rates, from 2.7 percent in 1990 to 5.0 percent in 2000. The 15 percent rate of growth of households with at least one child under 18 was much lower than the 40 percent increase in households without children under 18, so the District's share of households with children fell from 43 percent in 1990 to 38 percent in 2000, remaining slightly higher than the Portland metro area's 35 percent share. The average number of persons per household decreased from 2.81 in 1990 to 2.68 in 2000.

Several factors contributed to the decreases in household size and share of households with children, including the rapid growth in the population age 45 and over, declining fertility rates, and the large increase in the number of apartment homes, which often have fewer persons per household and higher vacancy rates than single family homes. The number of multiple family housing units within the OCSD increased by 75 percent between 1990 and 2000, and their share of all units increased from 18 to 23 percent.

Table 7		
Housing Units Authorized by Building Permits		
Year Permit Issued	City of Oregon City	
	Single Family	Multiple Family
1996	347	318
1997	232	78
1998	287	41
1999	465	8
2000	334	6
2001	311	19
2002	250	0
2003	259	24
2004	208	12
2005	214	0
2006	267	19
2007	237	0
2008	95	0
2009 (Jan-May)	26	4

Source: U.S. Census Bureau, Residential Construction Branch. Data available online at <http://censtats.census.gov/bldg/bldgprmt.shtml>.

Table 7 shows the number of housing units authorized in the City of Oregon City each year since 1996. Although the number of single family housing units authorized by building permits in 2006 was down by 18 percent nationally and 14 percent in the State

of Oregon compared with 2005, more single family homes were permitted in the City of Oregon City in 2006 than in any year since 2001. Residential permit activity in the City outpaced the 2006 level throughout the first several months of 2007, but slowed dramatically by the end of the year. In 2008, permits were issued for only 95 single family homes, less than one third of the average from the 1996 to 2006 period. So far in 2009, residential permit activity is on pace to be even lower than in 2008.⁴

In the 1990s, about 2,800 single family homes were built in the District, with most of the new construction occurring in the last half of the decade.⁵ In the five years from 1990 to

Table 8
Oregon City School District
Single Family Homes Built 2000 to 2007 by Attendance Area

Elementary Area *	Year Built								2000-07 Total
	2000	2001	2002	2003	2004	2005	2006	2007	
Beavercreek	54	45	23	34	66	78	36	55	391
Candy L./Jenn. L.	8	20	10	39	20	46	26	34	203
Gaffney Lane	121	72	23	3	20	16	10	12	277
Holcomb	21	23	61	59	70	52	13	19	318
John McLoughlin	149	174	138	170	26	75	120	80	932
King	3	4	2	2	8	8	6	19	52
Mount Pleasant	4	5	2	6	1	5	8	33	64
Park Place	3	10	15	8	8	27	74	31	176
Redland	34	26	41	58	64	42	45	41	351

Middle School Area*	Year Built								2000-07 Total
	2000	2001	2002	2003	2004	2005	2006	2007	
Gardiner	277	255	165	181	55	104	144	144	1325
Ogden	120	124	149	198	228	245	193	180	1437

District Total	397	379	315	379	283	349	338	324	2764
-----------------------	------------	------------	------------	------------	------------	------------	------------	------------	-------------

*Note: Current (2008-09) attendance areas.

Source: Clackamas County assessor data provided in geographic shapefile by Clackamas County GIS, January 2009. Single family homes identified and compiled by attendance area by PSU-PRC.

⁴U.S. Census Bureau, Residential Construction Branch. Data available for the U.S. and states at <http://www.census.gov/const/www/C40/table2.html>, and for counties and cities at <http://censtats.census.gov/bldg/bldgprmt.shtml>

⁵This estimate is based on land use and year built information from county tax assessor records. Because some homes may have been demolished or replaced in the 1990s, and some homes counted as mobile homes in the census may be on parcels identified as single family land use, the count of 2,793 parcels with a home built between 1990 and 1999 within the OCSD boundary in Metro's February 2007 Regional Land Information System is fairly consistent with the single family increase of 2,197 (plus mobile home increase of 499) units derived from census data shown in Table 6, which reports *net* change.

1994, an average of 165 single family homes were added each year, while the 1995 to 1999 period averaged 394 new single family homes annually. Between 2000 and 2007, new single family housing construction within the OCSD averaged 346 homes annually. Table 8 on the previous page reports single family homes built between 2000 and 2007 within the OCSD, using tax assessor data aligned with boundaries of the District's attendance areas.

The information about completed homes that we aggregated from tax assessor records only extends through 2007. To determine where current and future housing construction is occurring within the District, we gathered information about recently approved and pending subdivisions and updated the information presented in previous demographic reports. We determined that most of the subdivisions that were submitted in 2004 and before are substantially or entirely built out, so Tables 9 and 10 on the following pages contain lists of all residential land use applications within the OCSD submitted to the City and County since January 2005.

Homes have also been built on a majority of the lots in subdivisions approved in 2005, but some of the developments have not been completed and have homes under construction or lots for sale. The largest 2005 subdivision, the 96 lot Sequoia Crossing (Beavercreek Elementary), is just now completing its final phase of 26 homes. Tug's Landing (Mount Pleasant Elementary) is the other large subdivision approved in 2005. Its 53 lot first phase is mostly complete, but there are still homes for sale in the first phase and work is beginning on the 34 lot second phase approved in 2006.

The slow pace of development in subdivisions approved in 2006 and 2007 reflects the deteriorated housing market. By the time that infrastructure was in place in these subdivisions, there was little or no demand for new homes and homebuilding stalled. Construction is now underway in the 198 lot Sequoia Landing development (Beavercreek Elementary). As of April, 2009 about 20 homes had been built. Although attached townhomes generally house fewer students than detached homes, the marketing material for Sequoia Landing emphasizes that Oregon City High School is just across the street. At the 94 lot Caufield Place (Gaffney Lane Elementary), also approved in 2006, infrastructure is in place and the plat has been completed, but development was stalled as

of April 2009. Four attached homes were built but vacant, and no signs were posted marketing the development. In contrast, several homes have been built and a model home is open six days a week in the 81 lot Crabtree Terrace (Park Place Elementary) subdivision approved in 2007.

Table 9
Single Family Subdivisions
Oregon City School District, 2005 to 2008

Year*	Elementary School	Subdivision Name	Jurisdiction	Lots
2005	Can L./Jenn	Rinearson Creek (4920 SE Rinearson Rd)	Clackamas Co.	11
	Can L./Jenn	Rinearson Estates (5150 SE Rinearson Rd)	Clackamas Co.	7
	Can L./Jenn	Castle Park (19201 SE River Rd)	Clackamas Co.	10
	Beavercreek	Harmon's Crest	Clackamas Co.	11
	Can L./Jenn	Heron's Glen (17322 SE Blanton St)	Clackamas Co.	6
	Mount Pleasant	Tug's Landing (TP 05-01)	City of O.C.	53
	Mount Pleasant	Laurel Lane (TP 05-02)	City of O.C.	7
	Park Place	Thurman Estates (TP 05-03)	City of O.C.	8
	Park Place	Camelia Place (TP 05-04; formerly Rebholz Acres)	City of O.C.	16
	John McLoughlin	Frontier Place (TP 05-05)	City of O.C.	7
	King	Sophia Gardens (TP 05-06; formerly Brookside Estates)	City of O.C.	10
	Beavercreek	Sequoia Crossing (TP 05-07; row homes)	City of O.C.	96
	Holcomb	Oak Ridge (TP 05-08)	City of O.C.	9
	John McLoughlin	Katy's Place (TP 05-09)	City of O.C.	18
	Holcomb	Sunnybrook Estates (TP 05-10)	City of O.C.	13
		2005 Total:		282
2006	Holcomb	Gilbert Meadows (16092 S Holcomb Blvd)	Clackamas Co.	9
	Can L./Jenn	Samson Court (19225 SE River Rd)	Clackamas Co.	4
	Holcomb	Edgecliff (17107 S Cliffview Rd)	Clackamas Co.	**
	Park Place	Toman Heights (TP 06-01)	City of O.C.	8
	John McLoughlin	May's Point (TP 06-02)	City of O.C.	14
	Beavercreek	Sequoia Landing (TP 06-03; row homes)	City of O.C.	198
	John McLoughlin	Roman Place (TP 06-04)	City of O.C.	13
	Mount Pleasant	Aubrey's Meadow (TP 06-05)	City of O.C.	4
	John McLoughlin	Warner Parrott (TP 06-06)	City of O.C.	26
	Gaffney Lane	Caufield Place (TP 06-07; row homes)	City of O.C.	94
	John McLoughlin	Rachelle Estates (TP 06-08)	City of O.C.	9
	King	McGregor (TP 06-09)	City of O.C.	5
	Mount Pleasant	Tug's Landing No. 2 (TP 06-10)	City of O.C.	34
	Park Place	Maple Lane (TP 06-11)	City of O.C.	8
	Beavercreek	Chris Crossing (TP 06-12; row homes)	City of O.C.	16
		2006 Total:		442

table continued on next page

Table 9 (continued)
Single Family Subdivisions
Oregon City School District, 2005 to 2008

Elementary Area				
Year*	(2007-08)	Subdivision Name	Jurisdiction	Lots
2007	Can L./Jenn	Marie Meadows (17594 SE Rose St)	Clackamas Co.	4
	Beavercreek	Samson Estates (21855 S Beavercreek Rd)	Clackamas Co.	7
	Beavercreek	17314 S Steiner Rd	Clackamas Co.	**
	Beavercreek	Edgemont Estates (TP 07-01)	City of O.C.	9
	Park Place	Altona Ridge (TP 07-02)	City of O.C.	6
	Beavercreek	Aspen Grove (TP 07-03)	City of O.C.	8
	Park Place	Barlow Place (TP07-04)	City of O.C.	6
	Park Place	Crabtree Terrace (TP 07-05)	City of O.C.	81
	Park Place	Boyd/Lofgren (TP 07-06)	City of O.C.	23
	Park Place	Camellia Place II (TP 07-07)	City of O.C.	9
	Redland	Odell (TP 07-08)	City of O.C.	11
	Redland	Wildhorse (TP 07-09)	City of O.C.	4
	King	South End Townhomes (TP 07-10, row homes)	City of O.C.	23
	Gaffney Lane	428 Hilda St, (TP 07-11, row homes)	City of O.C.	5
	John McLoughlin	Overland Terrace (TP 07-12)	City of O.C.	95
	Gaffney Lane	Hilda Street (TP 07-14)	City of O.C.	5
	2007 Total:			
2008	Can L./Jenn	4221 SE Hull Ave	Clackamas Co.	25
	Can L./Jenn	Diane's Den (5212 SE Jennings Ave)	Clackamas Co.	5
	Redland	15956 S. Redland Rd	Clackamas Co.	4
	Park Place	Carroll Subdivision (TP 08-01)	City of O.C.	6
	Park Place	Cherri Meadows (TP 08-02)	City of O.C.	5
	Redland	Thayer Rd Townhomes (TP 08-03, row homes)	City of O.C.	84
	Mount Pleasant	Evergreen Meadows (TP 08-04)	City of O.C.	8
	John McLoughlin	SunStone Ridge (TP 08-05)	City of O.C.	95
	John McLoughlin	Hollow Point (TP 08-06)	City of O.C.	33
	John McLoughlin	19510, 19526 Leland Rd (TP 08-08)	City of O.C.	9
	John McLoughlin	19367 S Leland Rd (TP 08-10)	City of O.C.	4
	2008 Total:			
Grand Total 2005 - 2008:				1298

**Note: "Year" generally indicates the year that the land use application was first submitted. Approval, final plat, construction and occupancy may be in later years.*

***Note: Measure 37 claim listed in previous report; due to Measure 49, the number of lots is unknown.*

Sources: Compiled by Population Research Center, PSU; primary information from City and County planning departments and from previous OCSD demographic studies. Some information updated from tax assessor maps or developers. The number of lots sometimes changes between initial approval and final plat, so lot counts in this table may differ slightly from those published elsewhere.

Table 10
Multiple Family Developments
Oregon City School District, 2005 to 2008

Year*	Elementary School	Development Name	Jurisdiction	Units
2005	Holcomb	Cameo Condos (SP 05-27; townhomes)	City of O.C.	7
		2005 Total:		7
2006	Beavercreek	Village at Sequoia Landing (condos)	City of O.C.	114
	Gaffney Lane	SP 06-08 (multi-family)	City of O.C.	12
		2006 Total:		126
2007	Holcomb	16361 Wittke Ct	City of O.C.	12
		2007 Total:		12
2008	Holcomb	107 Morton Rd (TP 08-09, duplexes)	City of O.C.	24
	Park Place	The Cove (TP 08-11, master plan)	City of O.C.	-- ²
		2008 Total:		24
		Grand Total 2005 - 2008:		169

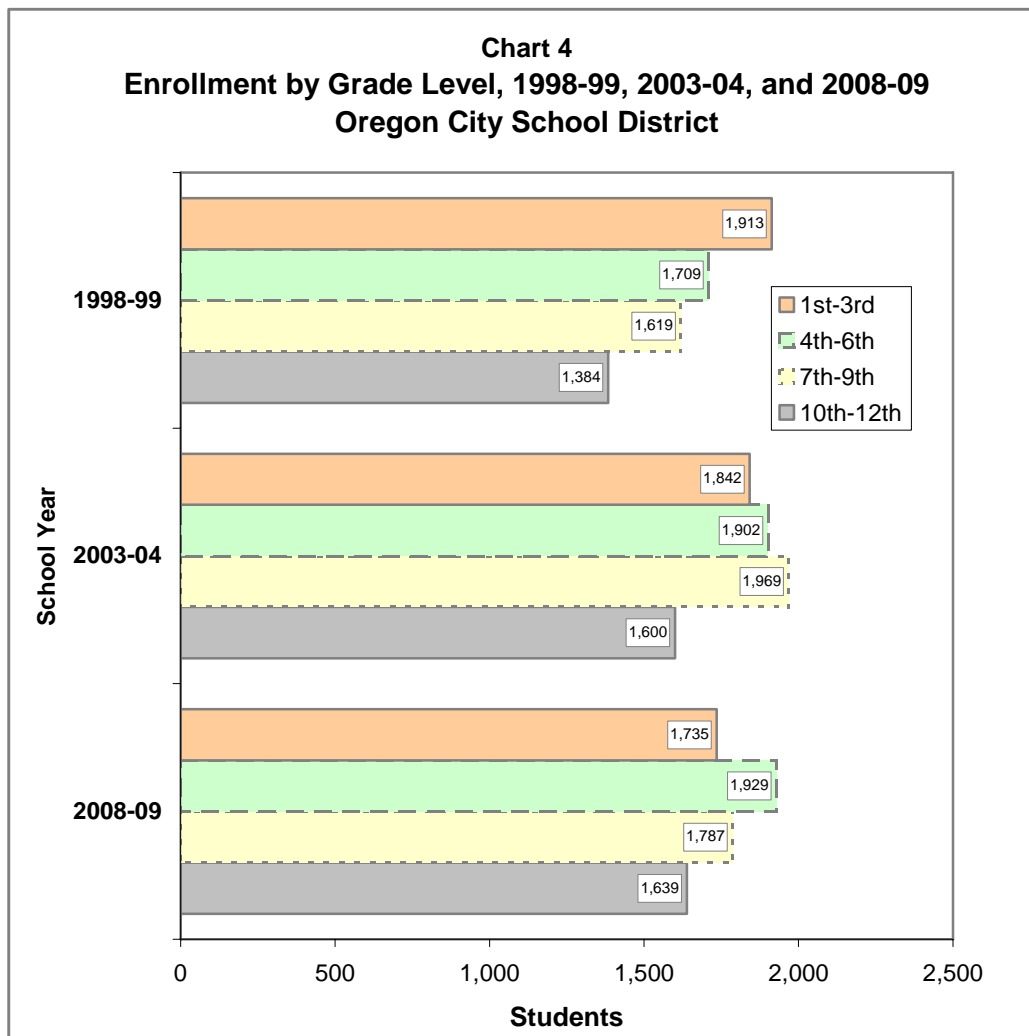
1. "Year" generally indicates the year that of initial application for a land use change or site plan. Approval, construction and occupancy may be in later years.

2. Current plans call for 224 multi-family units and the subdivision application has been approved. However, the applicant is required to submit a site plan and design review (application to construct multi-family) before any units may be constructed.

Sources: Compiled by Population Research Center, PSU; primary information from City of Oregon City planning department and from previous OCSD demographic studies.

ENROLLMENT TRENDS

After seven consecutive years of growth, total K-12 enrollment in the Oregon City School District reached about 8,000 students in 2004-05. Since 2004-05 there have been four years of K-12 enrollment decline, including a loss of 77 students (1.0 percent) in 2008-09. The District's enrollment in 2008-09 was 361 students (4.5 percent) below its 2004-05 peak.



Demographic trends including the aging of the population and the declining share of households with children have contributed to the current plateau of school-age population

within the district. During the late 1990s and early 2000s, there were consistently larger cohorts in elementary grades than in secondary grades, so total K-12 enrollment grew partly due to more students entering primary grades than graduating or leaving high school. Chart 4 illustrates this by showing enrollments in 1998-99, 2003-04, and 2008-09 by grade level groups. In 1998-99, the largest numbers of students were in grades 1-3, and there were successively fewer students in each older age group. There were *529 more students* in grades 1-3 than in grades 10-12. In 2003-04, enrollment in grades 1-3 had begun to decline, but grades 1-3 still enrolled *242 more students* than grades 10-12. By 2008-09, enrollment in grades 1-3 had fallen further, and had only *96 more students* than grades 10-12.

There are currently many more adults in their 40s and 50s than in their 20s and 30s, so it is not surprising that the school age population is not growing as fast as the housing stock or total population, and that among families who do have school age children, the share of older children is growing.

In addition to demographic trends, the opening and expansion of the district's first charter schools has influenced enrollment in district-run schools since 2006-07. The Springwater Environmental Sciences School enrolled 85 students in grades K-4 in Fall 2006, and grew to 146 students in grades K-6 in Fall 2008. The Oregon City Service Learning Academy (OCSLA), grades 9-12, enrolled 82 students in Fall 2006 and 97 students in Fall 2008. A third charter school, Alliance Charter Academy, opened in Fall 2007 and by Fall 2008 was serving about 300 students from many districts including OCSD. Students enrolled at these charter schools are not included in the district-wide enrollment figures reported in this section or in the forecasts that follow.

About 90 percent of Springwater and 80 percent of OCSLA students are OCSD residents, and it is likely that many or most would have been enrolled in OCSD district-run schools had the charter schools not been an option. If students at these two charter schools were included in the 2008-09 figures, OCSD K-12 enrollment would have only declined by about 120 students from its 2004-05 peak. Elementary (K-6) enrollment would have decreased by 36 students (rather than 182), and high school (9-12) enrollment would have increased by 23 students (rather than decreasing by 74). Alliance Charter Academy has a

smaller impact on district-run schools because most of its students had previously been counted as home schooled, and only about a dozen of its students had been enrolled in OCSD schools the previous year.

Historically, the most popular public school option for OCSD residents was to attend schools in the Gladstone District, a legacy of the mid-1990s merger between Redland and Oregon City school districts whereby OCSD and Gladstone residents could choose to attend schools in the other District. Since 1999, the option has only been available for students in grades 7 to 12, and the number of students participating has steadily decreased. Table 11 shows that the number of OCSD residents attending Gladstone schools, either through the Student Choice Plan or regular inter-district transfers, is about half of what it was eight years ago.

Table 11
Oregon City Students in Gladstone Schools and Charter Schools

School Year	OCSD Students at Gladstone Schools ¹		OCSD Charter Schools ²		OCSD Enrollment ³	Total ⁴
	Number	Share	Number	Share		
2000-01	502	6.4%			7,339	7,841
2001-02	432	5.5%			7,410	7,842
2002-03	350	4.4%			7,672	8,022
2003-04	316	3.8%			7,928	8,244
2004-05	323	3.9%			7,996	8,319
2005-06	347	4.2%			7,953	8,300
2006-07	298	3.6%	167	2.0%	7,764	8,229
2007-08	256	3.0%	458	5.4%	7,712	8,426
2008-09	260	3.1%	567	6.7%	7,635	8,462

1. Number of OCSD residents enrolling in Gladstone schools through the Student Choice Plan or interdistrict transfers.

2. Springwater Environmental Sciences School and Oregon City Service Learning Academy were established in 2006. Alliance Charter Academy was established in 2007. Total charter school enrollment includes OCSD residents as well as non-residents.

3. District-run schools only.

4. Total of district-run schools, charter schools, and OCSD residents at Gladstone schools.

Inter-district transfers involving Gladstone and other districts have generally resulted in a net loss of students, and the current year's balance of 72 more students transferring out than transferring in represents close to one percent of the District's public school

population. Inter-district transfers by school level for each of the past three years are reported in Table 12.

Table 12				
Inter-District Transfers				
2005-06	K-6	7-8	9-12	Total
Into Oregon City S.D.	14	6	37	57
Out of Oregon City S.D.	41	18	33	92
Net	-27	-12	4	-35
2006-07				
Into Oregon City S.D.	11	1	21	33
Out of Oregon City S.D.	56	20	47	123
Net	-45	-19	-26	-90
2007-08				
Into Oregon City S.D.	13	3	16	32
Out of Oregon City S.D.	48	16	40	104
Net	-35	-13	-24	-72
2008-09				
Into Oregon City S.D.	14	4	10	28
Out of Oregon City S.D.	49	8	43	100
Net	-35	-4	-33	-72
<i>Source: Oregon City School District</i>				

Private and Home School Enrollment

The major private schools in Oregon City are the North Clackamas Christian School, enrolling 215 students in grades K-12 in 2008-09, and St. John the Apostle Catholic School, serving about 180 students in grades K-8. Just outside of the OCSD boundaries, Rivergate Adventist Elementary School in Gladstone serving about 135 students in grades K-8 is currently raising funds for a building expansion.

Private schools within the OCSD enroll local students as well as students from beyond the OCSD boundaries; conversely OCSD residents attend private schools beyond the District's boundaries, so the number of students enrolled in private schools physically located within the District can not be used to measure overall private school share. The best estimates of private school enrollment for OCSD residents come from the Census Bureau — the 2000 Census “long form” and the more recent American Community Survey (ACS). In the 2000 Census and also the 2005 to 2007 ACS, about 1,100 of the K-

12 students living in the District were reported as private school students, a 12 percent share of all K-12 students.⁶ For Kindergarten and early elementary grades 1-4, the shares of OCSD residents attending private schools in 2000 were slightly higher than the private school shares for the rest of Clackamas County. Among older students in grades 5-8 and 9-12, there was little difference between the OCSD and Clackamas County private school shares. The number and share of OCSD residents attending private schools in 2000 was significantly higher than in 1990, when the census counted about 400 students in grades 1-12, a five percent share.⁷

Another difference between public school enrollment and total school age population can be attributed to home schooling. Home schooled students age 7 to 18 living in the District are required to register with the Clackamas Educational Service District (CESD), though the statistics kept by the CESD are not precise because students who move out of the area are not required to drop their registration. Students who enroll in public schools after being registered as home schooled are dropped from the home school registry. Currently (February 2009) there are 428 OCSD residents registered, as shown in Table 13. The current number of registered home school students represents about three percent of the OCSD's resident elementary population, five percent of its middle school population, and seven percent of its high school population.

Table 13 Home School Students Residing in OCSD¹				
	Grade 1-6	Grade 7-8	Grade 9-12	Total
2006-07 ²	154	84	200	438
2007-08 ³	146	68	219	433
2008-09 ⁴	149	65	214	428

¹ Residents of OCSD age 7-18 enrolled with Clackamas Education Service District.
² February 23, 2007.
³ January 17, 2008.
⁴ February 2, 2009.
Source: Clackamas Education Service District

⁶U.S. Census Bureau, 2000 Census, Summary File 3, Table P36; U.S. Census Bureau 2005-2007 American Community Survey 3 year estimates, Table C14002.

⁷In 1990, figures are available for grades 1-12, rather than K-12, as in 2000. The comparable figure for grades 1-12 from the 2000 Census is 938 students, an 11 percent share.

Neighboring Districts

Table 14 displays several facts about OCSD demographic and enrollment trends in comparison to three other nearby Clackamas County school districts. The overall enrollment growth or decline in each district is influenced by housing construction, and also by the district's unique demographics. Housing development within the OCSD was much greater in the late 1990s and early 2000s than in the early 1990s, and that is reflected in the different growth rates by period. Conversely, Canby added more housing in the early 1990s than in the more recent periods. Gladstone and Canby have both lost enrollment in the past few years as relatively small classes have entered elementary grades. Compared with the three other districts, OCSD's enrollment growth between 1990 and 2000 was slower than its overall population growth because it experienced significant decline in its school-age population share.

Table 14
Selected Clackamas County School Districts
Demographic and Enrollment Highlights, 1990 to 2008

	Oregon City	Canby	Gladstone	North Clackamas
Enrollment growth, 1990-91 to 1995-96	-1%	13%	12%	13%
Enrollment growth, 1995-96 to 2000-01	6%	9%	5%	8%
Enrollment growth, 2000-01 to 2008-09	4%	-5%	-13%	18%
Latino enrollment, 2008-09	8%	23%	11%	12%
Grades 9-12 enrollment, 2008-09	29%	33%	36%	34%
Population growth, 1990 to 2000	24%	18%	15%	26%
Multi-family housing share, 2000	23%	24%	26%	38%
Population age 5 to 17, 1990	20.9%	20.1%	19.7%	17.3%
Population age 5 to 17, 2000	19.1%	20.5%	19.2%	17.6%
Population under age 5, 1990	7.6%	6.8%	6.7%	6.4%
Population under age 5, 2000	7.2%	6.4%	6.8%	6.8%
Population rural, 2000	16.5%	35.6%	0.0%	1.0%

Data assembled by Population Research Center, PSU, from several sources: U.S. Census Bureau; Canby S.D.; Oregon City S.D.; North Clackamas S.D.; OR Dept. of Education; U.S. Dept. of Education.

District-wide Enrollment

Notable district-wide enrollment trends include:

- Although K-12 enrollment has fallen in the past four years, it remains more than 400 students (six percent) greater than 10 years ago in 1998-99.
- Kindergarten and 1st grade enrollments have increased in each of the past two years, though they remain low compared with the late 1990s and early 2000s.
- The largest numbers of students in Fall 2008 were enrolled in 4th, 5th, and 6th grades. Enrollments in these grades remained close to their all time highs, representing a significant “bulge” about to enter middle school.
- Total K-6th grade enrollment in district-run elementary schools decreased by 38 students (0.9 percent) between Fall 2007 and Fall 2008.
- Total 7th-8th grade enrollment in district-run middle schools decreased by 48 students (3.9 percent) between Fall 2007 and Fall 2008.
- Enrollment at Oregon City High School was stable between Fall 2007 and Fall 2008, increasing by nine students (0.4 percent).

Table 15 summarizes the enrollment history for the District by grade level annually from 2003-04 to 2008-09.

Table 15
Oregon City School District
Enrollment History, 2003-04 to 2008-09

Historic Enrollment ¹						
Grade	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
K	615	584	541	516	529	545
1	643	635	617	556	565	570
2	605	654	658	619	589	559
3	594	611	664	641	644	606
4	616	599	605	650	642	635
5	659	633	594	633	654	646
6	627	675	627	615	624	648
7	662	637	651	619	633	573
8	658	663	622	656	610	622
9	649	669	658	617	623	592
10	593	606	623	583	571	577
11	506	545	562	541	531	535
12	501	485	524	518	497	527
US²	0	0	7	0	0	0
Total	7,928	7,996	7,953	7,764	7,712	7,635
One Year Change:		68 (0.9%)	-43 (-0.5%)	-189 (-2.4%)	-52 (-0.7%)	-77 (-1.0%)
Five Year Change:						-293 (-3.7%)
K-6	4,359	4,391	4,306	4,230	4,247	4,209
One Year Change:		32 (0.7%)	-85 (-1.9%)	-76 (-1.8%)	17 (0.4%)	-38 (-0.9%)
Five Year Change:						-150 (-3.4%)
7-8	1,320	1,300	1,273	1,275	1,243	1,195
One Year Change:		-20 (-1.5%)	-27 (-2.1%)	2 (0.2%)	-32 (-2.5%)	-48 (-3.9%)
Five Year Change:						-125 (-9.5%)
9-12	2,249	2,305	2,374	2,259	2,222	2,231
One Year Change:		56 (2.5%)	69 (3.0%)	-115 (-4.8%)	-37 (-1.6%)	9 (0.4%)
Five Year Change:						-18 (-0.8%)

1. Does not include enrollment at charter schools.

2. "US" is ungraded secondary; included in grade 9-12 totals.

Source: Oregon City School District, September 30 quarterly report information.

Enrollment Trends at Individual Schools

Enrollment growth between Fall 2007 and Fall 2008 at Candy Lane (24 students) and Holcomb (31 students) bucked the District's downward trend. Both schools also experienced similar growth the previous year. The biggest enrollment losses among elementary schools occurred at Redland (loss of 56 students), Jennings Lodge (loss of 26 students), and Park Place (loss of 18 students). The other five elementary schools remained within 13 students of their Fall 2007 enrollments.

Both of the District's middle schools lost enrollment between Fall 2007 and Fall 2008. Gardiner's enrollment was 21 students lower and Ogden was 27 students lower than one year earlier. Gardiner is now 84 students below its peak of 641 students in 2003-04, and Ogden is 75 students below its 2004-05 peak of 713 students. Because the District's middle schools only include two grades, enrollments are subject to annual fluctuation based on the size of the incoming 7th grade class relative to the previous year's 8th grade class.

Oregon City High School gained enrollment each year beginning in 2000-01 (including the Moss Freshman Campus prior to 2003), reaching a peak of 2,374 students in 2005-06. During the six years of growth, high school enrollment swelled by 477 students. In Fall 2008, OCHS enrolled 2,231 students, 143 fewer than the Fall 2005 peak but nine students bigger than the previous year, Fall 2007. The OCSLA charter school enrolled 97 students in Fall 2008, so overall high school enrollment has fallen very little since 2005 if OCSLA were included.

Total enrollments at each of the District's schools from 2003-04 to 2008-09 are shown in Table 16 on the next page. Enrollment change is calculated for the five year period.

Table 16
Enrollment History for Individual Schools, 2003-04 to 2008-09

School	Historic Enrollment						Change 2003-04 to 2008-09	
	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	Number	Percent
Beavercreek Elementary	474	494	511	494	454	462	-12	-2.5%
Candy Lane Elementary (3rd-6th)	256	243	232	221	243	267	11	4.3%
Gaffney Lane Elementary	665	574	584	590	575	574	-91	-13.7%
Holcomb Elementary	416	423	431	427	456	487	71	17.1%
Jennings Lodge Elementary (K-3rd)	308	309	293	312	319	293	-15	-4.9%
John McLoughlin Elementary	595	556	572	579	582	591	-4	-0.7%
King Elementary	380	466	412	402	419	406	26	6.8%
Mt. Pleasant Elementary	362	426	402	400	391	395	33	9.1%
Park Place Elementary	310	296	286	259	286	268	-42	-13.5%
Redland Elementary	593	604	583	546	522	466	-127	-21.4%
Elementary Totals	4,359	4,391	4,306	4,230	4,247	4,209	-150	-3.4%
Gardiner Middle School	641	587	608	611	578	557	-84	-13.1%
Ogden Middle School	679	713	665	664	665	638	-41	-6.0%
Middle School Totals	1,320	1,300	1,273	1,275	1,243	1,195	-125	-9.5%
Oregon City High School	2,249	2,305	2,374	2,259	2,222	2,231	-18	-0.8%
District Totals	7,928	7,996	7,953	7,764	7,712	7,635	-293	-3.7%

Source: Oregon City School District, September 30 quarterly report information.

HOUSING DEVELOPMENT AND STUDENT GENERATION

For school districts experiencing growth in their housing stock, understanding the existing demographics of the district is not enough. A common concern of community members and school officials is the impact of new residential development on school enrollment. New housing generally contributes enrollment growth to local schools, but the average number of students in each home is often lower than many people anticipate, and demographic trends in existing homes may either offset or exacerbate the enrollment gains from new housing. Also, the impacts vary by the characteristics of the new housing. In this section, we present estimates of student generation by jurisdiction for new housing in the OCSD. These estimates help to inform the enrollment forecasts, and they can be used by District staff on an *ad hoc* basis to estimate potential student generation from future developments as they are proposed or approved.

We estimated the Fall 2008 number of students per housing unit built between 2000 and 2007 in a geographic information system (GIS), matching student addresses with tax lots and their associated attributes. Attribute data from the Clackamas County tax assessor's office allowed us to determine whether each tax lot included a home, the year that the home was built, the type of home, and the lot size. Student records contain no personally identifiable data such as names or birth dates, and the information is reported only in aggregate or summary form, such as in the tables in this section.

For the District, the average number of K-12 students per recently built home was 0.48, just under one student for every two homes. Homes built in the 1990s had a similar K-12 student generation rate (0.46) as those built since 2000. The rates are slightly lower than we have measured for single family homes in other recent studies for area school districts.⁸

⁸For example, 0.51 in the Tigard-Tualatin School District, 0.53 in the North Marion School District, and 0.57 in the Canby School District.

A closer look at the rates by jurisdiction and by decade built, presented in Tables 17 and 18 and in Chart 5, shows that average student generation rates are consistently higher in the City of Oregon City than in unincorporated Clackamas County, and that homes built in the 1990s are home to more high school students and fewer elementary students than those built since 2000.

Within the City of Oregon City, where more than 75 percent of the District's recent single family housing construction has occurred, there are an average of 0.50 OCSD students per home built since 2000. Unincorporated area homes built since 2000 are home to an average of 0.39 students each.

Table 17
OCSD Students per Single Family Home, Fall 2008
Homes Built 2000 to 2007

Jurisdiction	Grade Level			
	K-6	7-8	9-12	K-12
District Total	0.30	0.07	0.11	0.48
City of Oregon City	0.31	0.08	0.11	0.50
lot size > 3,500 s.f.	--	--	--	0.52
lot size < 3,500 s.f.*	--	--	--	0.31
Unincorporated Area	0.24	0.06	0.09	0.39

**Note: Includes just 61 attached or small lot detached homes, mostly built in 2006. New development now underway will add significantly to the single family attached housing stock and provide a larger universe for analysis in future reports.*

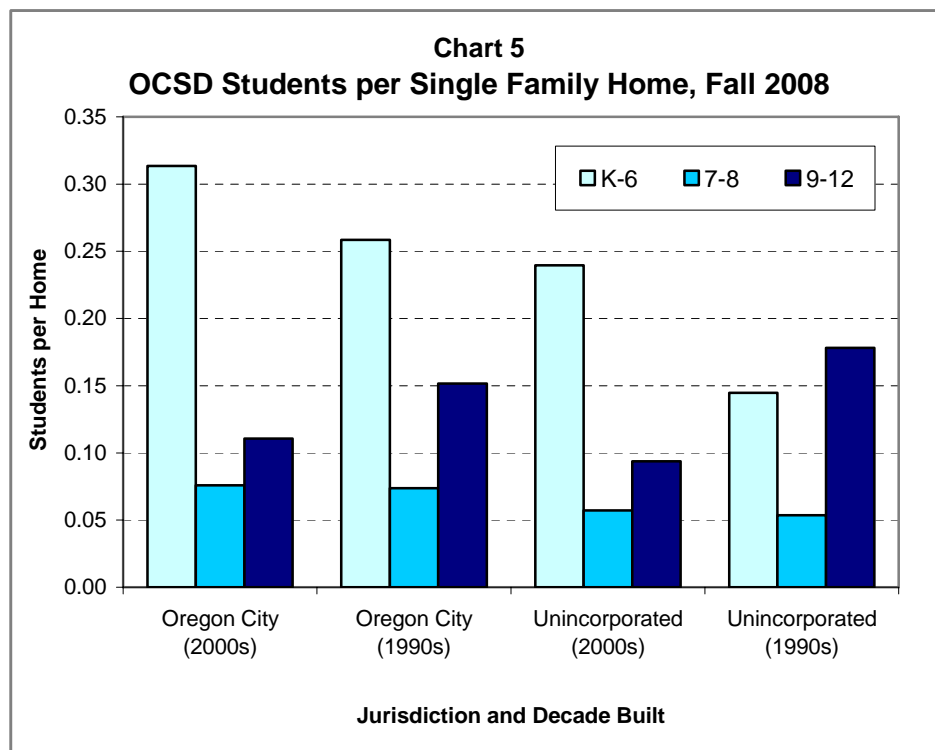
Source: Data compiled by PSU-PRC, using geographic shape files from Clackamas County GIS and tax lot attribute data from Clackamas County Assessor's Office. Housing unit counts were determined by PSU-PRC using the attribute data.

Table 18
OCSD Students per Single Family Home, Fall 2008
Homes Built 1990 to 1999

Jurisdiction	Grade Level			
	K-6	7-8	9-12	K-12
District Total	0.23	0.07	0.16	0.46
City of Oregon City	0.26	0.07	0.15	0.48
Unincorporated Area	0.14	0.05	0.18	0.38

Source: Data compiled by PSU-PRC, using geographic shape files from Clackamas County GIS and tax lot attribute data from Clackamas County Assessor's Office. Housing unit counts were determined by PSU-PRC using the attribute data.

In both the City and the unincorporated area, families living in homes built in the 1990s currently have older children, on average, than those living in homes built since 2000. District-wide, there are 48 percent more high school students and 22 percent fewer elementary students per home built in the 1990s compared with the average home built between 2000 and 2007. As the older children graduate from high school, the homes built in the 1990s will soon have fewer K-12 residents than the newer homes. Although younger families may eventually occupy the older homes, owner-occupied homes turn over to new owners very gradually, and household composition of existing homes tends to be more diverse than the families with children who are well represented among buyers of new tract homes. We found that homes built within the OCSD before 1990 had an average of 0.37 K-12 students per home, 21 percent fewer than those built since 1990.



Rates may vary considerably among different subdivisions, depending on factors such as proximity to schools and parks, number of bedrooms, and lot sizes. Because a large share of upcoming construction is occurring in attached housing on very small lots, we also measured Fall 2008 rates for homes on lots smaller than 3,500 square feet. The analysis includes just 163 homes built in 2006 and 2007 on small lots in just a few new

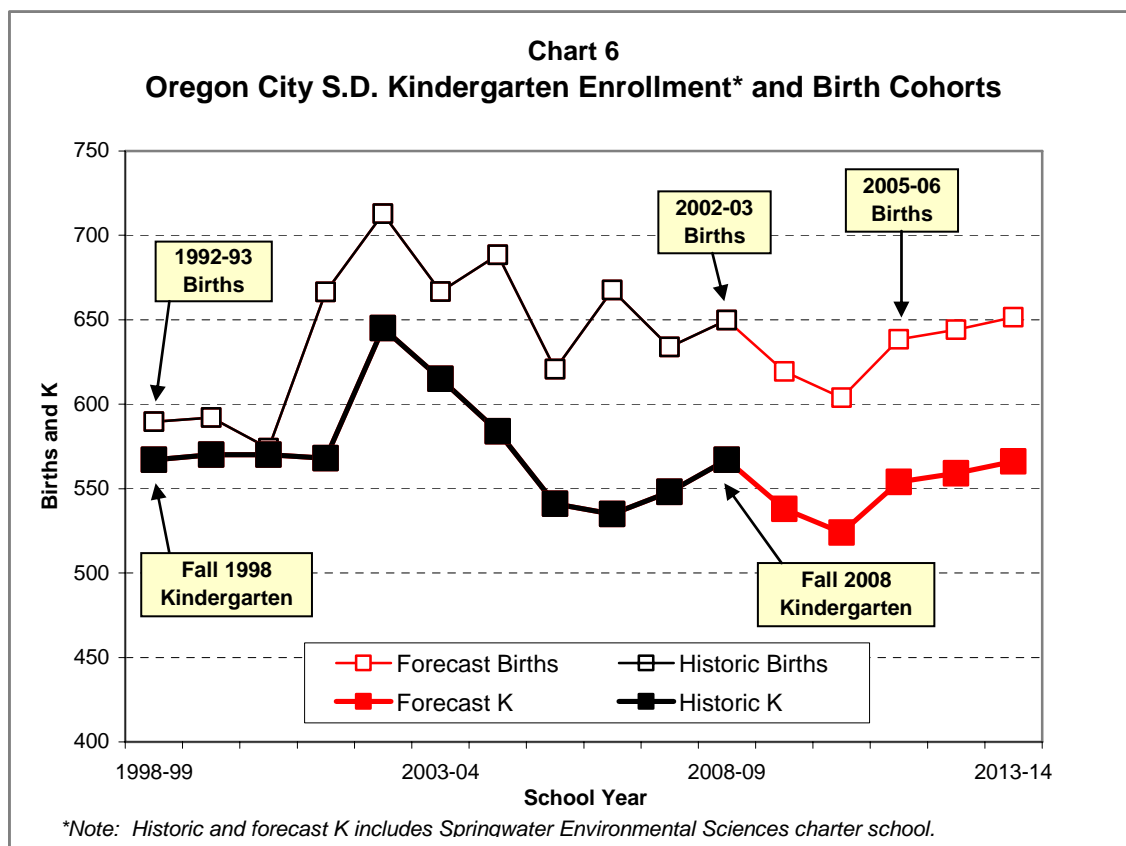
subdivisions, so the results may not be representative of all future small lot developments, but we found fewer students per home on the smaller lots. There was an average of 0.31 OCSD students per home on lots smaller than 3,500 square feet, compared with 0.52 OCSD students per home built since 2000 on lots larger than 3,500 square feet.

ENROLLMENT FORECASTS

District-wide Enrollment Forecast

These enrollment forecasts rely primarily on input from three general sources of information: births, recent enrollment history, and housing development data. In the model used to produce the forecast, we base assumptions about future migration levels on recent migration trends and the level of housing growth expected in the future.

Births to women residing within the specific boundaries of the District were estimated for the years 1990 to 2007, using individual birth records obtained through a data use agreement with the Oregon Center for Health Statistics. This data provides a closer spatial and chronological fit than the annual data published by zip code, as births can be grouped by school attendance area and by grade cohort (September to August). Chart 6



shows the relationship between the number of births in the District and the kindergarten class sizes five years later. For example, the Fall 1997 kindergarten class is aligned with the September 1991 to August 1992 births. Between Fall 1997 and Fall 2000, there were nearly as many OCSD kindergarten students each year as there were births in the cohort, indicating net in-migration that compensated for the share of residents not enrolled in OCSD kindergartens. Since Fall 2001, the ratio of kindergarten enrollment to lagged births has averaged about 87 percent. The most recent census data from 2000 indicates that about 80 percent of kindergarten residents enroll in OCSD schools, so migration is still contributing to kindergarten enrollment, though not as much as in the late 1990s.

Kindergarten enrollment increased slightly between Fall 2007 and Fall 2008, corresponding closely with an increase in births between 2001-02 and 2002-03, but the long term trend of smaller kindergarten classes since the Fall 2002 peak has generally followed the downturn in births since 1996-97. Based on the close relationship between District births and subsequent kindergarten class size, the number of OCSD kindergartners is forecast to decrease in each of the next two years, and then increase in following years. Kindergarten forecasts reported in this section are slightly lower than those shown in Chart 6, because adjustments have been made to account for OCSD residents enrolled at the Springwater Environmental Sciences charter school.

Several years of recent OCSD enrollment history were evaluated to develop initial grade progression rates (GPRs) for the forecast. The GPR is the ratio of enrollment in a specific grade in one year to the enrollment of the same age cohort in the previous year. For example, the number of students enrolled in second grade this year divided by the number of students enrolled in first grade last year. Rates for some grades may be consistently high, indicating that new students are entering the District from private schools. For this reason, it is common to see higher GPRs for the K-1st and 8th-9th grade transitions. In grades 10, 11, or 12, low GPRs can indicate that students are leaving high school or being retained at lower grade levels. But for most elementary grades, if the population entering and leaving the District is in balance and there is not widespread grade retention, one can expect GPRs very close to 1.00.

GPRs observed for elementary grades between Fall 2007 and Fall 2008 reveal that net migration at the elementary level was close to zero. In other words, the number of students in 2nd through 6th grade in Fall 2008 was nearly identical to the number of students in 1st through 5th grade in Fall 2007; the number of students entering and leaving District schools was in balance. This contrasts with most previous years when the District gained students due to net migration.

Forecast GPRs for the 2009-10 to 2013-14 school years reflect the expectation of modest growth due to net migration, similar to the average of the previous five years which include examples of positive in-migration as well zero net migration. The elementary migration rates generally above 1.00 illustrate that the District's elementary enrollment losses have not been due to students leaving the District; they have been influenced by smaller incoming kindergarten classes as well as charter school alternatives. Table 19 compares the average GPRs in the enrollment forecast with the observed average of the previous five years.

Table 19 Average Grade Progression Rates* OCSD, Historic and Forecast		
Grade Transition	Historic 2003-04 to 2008-09	Forecast 2008-09 to 2013-14
K-1	1.06	1.08
1-2	1.02	1.02
2-3	1.01	1.02
3-4	0.99	1.00
4-5	1.02	1.02
5-6	1.01	1.00
6-7	0.98	0.99
7-8	0.99	0.99
8-9	0.98	0.99
9-10	0.92	0.94
10-11	0.91	0.95
11-12	0.95	0.98

**Ratio of enrollment in an individual grade to enrollment in the previous grade the previous year. The figures are averages for each period.*

Total K-12 enrollment in district-run schools is forecast to fall in each of the next two years, and then remain relatively stable for the remaining three years of the forecast. Fall 2013 K-12 enrollment is 113 students (1.5 percent) below the Fall 2008 level. The enrollment decline in the next two years is concentrated at the elementary level. This is primarily due to smaller classes entering kindergarten replacing the relatively larger classes currently in 5th and 6th grade. Middle school (7th-8th) enrollment is forecast to increase by about 70 students in the next two years and then decrease by about 100 students between 2010-11 and 2013-14. With the exception of 2010-11, when enrollment in grades 9-12 is forecast to fall by about 60 students, high school enrollment is fairly stable in the forecast, with modest gains each year from 2011-12 to 2013-14

Table 20 contains grade level forecasts for the Oregon City School District for each year from 2009-10 to 2013-14. The forecasts are also summarized by grade level groups (K-6, 7-8, and 9-12). The table includes six years of historic enrollment figures to facilitate comparison between historic and forecast enrollment change by single year and five year increments.

Table 20
Oregon City School District, Enrollment History and Forecasts, 2003-04 to 2013-14

Historic Enrollment ¹							Forecast Enrollment ¹				
Grade	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
K	615	584	541	516	529	545	516	502	532	537	544
1	643	635	617	556	565	570	587	556	544	576	582
2	605	654	658	619	589	559	581	599	567	555	587
3	594	611	664	641	644	606	569	592	610	577	565
4	616	599	605	650	642	635	605	568	595	614	580
5	659	633	594	633	654	646	645	615	577	605	624
6	627	675	627	615	624	648	644	643	615	577	605
7	662	637	651	619	633	573	639	635	634	607	569
8	658	663	622	656	610	622	566	631	627	626	599
9	649	669	658	617	623	592	600	544	636	626	630
10	593	606	623	583	571	577	555	563	511	599	589
11	506	545	562	541	531	535	545	524	535	486	569
12	501	485	524	518	497	527	524	533	516	526	479
US ²	0	0	7	0	0	0	0	0	0	0	0
Total	7,928	7,996	7,953	7,764	7,712	7,635	7,576	7,505	7,499	7,511	7,522
One Year Change:	68 (0.9%)	-43 (-0.5%)	-189 (-2.4%)	-52 (-0.7%)	-77 (-1.0%)		-59 (-0.8%)	-71 (-0.9%)	-6 (-0.1%)	12 (0.2%)	11 (0.1%)
Five Year Change:						-293 (-3.7%)					-113 (-1.5%)
K-6	4,359	4,391	4,306	4,230	4,247	4,209	4,147	4,075	4,040	4,041	4,087
One Year Change:	32 (0.7%)	-85 (-1.9%)	-76 (-1.8%)	17 (0.4%)	-38 (-0.9%)		-62 (-1.5%)	-72 (-1.7%)	-35 (-0.9%)	1 (0.0%)	46 (1.1%)
Five Year Change:						-150 (-3.4%)					-122 (-2.9%)
7-8	1,320	1,300	1,273	1,275	1,243	1,195	1,205	1,266	1,261	1,233	1,168
One Year Change:	-20 (-1.5%)	-27 (-2.1%)	2 (0.2%)	-32 (-2.5%)	-48 (-3.9%)		10 (0.8%)	61 (5.1%)	-5 (-0.4%)	-28 (-2.2%)	-65 (-5.3%)
Five Year Change:						-125 (-9.5%)					-27 (-2.3%)
9-12	2,249	2,305	2,374	2,259	2,222	2,231	2,224	2,164	2,198	2,237	2,267
One Year Change:	56 (2.5%)	69 (3.0%)	-115 (-4.8%)	-37 (-1.6%)	9 (0.4%)		-7 (-0.3%)	-60 (-2.7%)	34 (1.6%)	39 (1.8%)	30 (1.3%)
Five Year Change:						-18 (-0.8%)					36 (1.6%)

1. Does not include enrollment at charter schools.

2. "US" is ungraded secondary; included in grade 9-12 totals

Historic: Oregon City School District, September 30 quarterly report information.

Forecast: Population Research Center, Portland State University, May 2009.

Individual School Forecasts

We prepared forecasts for individual schools under a scenario in which current boundaries and grade configurations remain constant. Program changes, school choice policies, or other decisions about individual schools and the students they serve could impact enrollment in ways that these forecasts do not anticipate. For example, the pending closure of Park Place Elementary in Summer 2009 will result in enrollment increases at Holcomb and Redland. The individual school forecasts depict what future enrollments might be if today's facilities, programs, and boundaries were unchanged.

The methodology for the individual school forecasts relies on unique sets of grade progression rates for each school and the ratio of kindergarten enrollment to lagged births within the school's attendance area. New kindergarten classes are based on the number of births and a ratio that incorporates the expected level of migration between birth and age five as well as the public school "capture" rate. Subsequent grades are forecast using GPRs based initially on recent rates and adjusted based on expected levels of housing growth. The final forecasts for individual schools are controlled to match the district-wide forecasts.

Among the District's elementary schools, enrollment increase between 2008-09 and 2013-14 is forecast at Holcomb (38 students, or eight percent). The 2013-14 enrollments at Beavercreek, Gaffney Lane, Jennings Lodge, John McLoughlin, and Mt. Pleasant are forecast to be very close to the 2008-09 enrollments, while enrollment declines of 18 to 55 students are forecast at Candy Lane, King, Park Place, and Redland.

Although migration can contribute to enrollment gains at the secondary level as well as the elementary level, enrollment changes at Gardiner, Ogden, and OCHS depend largely on the size of the classes moving up from feeder schools. Both Gardiner and Ogden are expected to grow in the next few years, with Gardner reaching a peak of 607 students in 2010-11 and Ogden reaching a peak of 676 in 2011-12. Oregon City High School is expected to lose about 70 students over the next two years, and then grow by 30 to 40 students each year in 2011-12, 2012-13, and 2013-14.

The timing of future large scale development planned in areas added to the urban growth boundary in 2002 is uncertain at this time due to the shift in demand for housing as well as the November 2008 defeat of annexations in both the Park Place and Beaver Creek Road areas. Concept plans have been prepared for these areas but the City acknowledges that “these are long term-plans which plan for land in the far future and are not expected to be fully implemented for a few decades.”⁹ The Park Place Concept Plan adopted by the City Commission in April, 2008 includes “two distinct mixed use neighborhoods ... that accommodate 1,459 new dwelling units” and may result in approximately 350 elementary school students, 150 middle school students, and 150 high school students over the next five to 20 years.¹⁰ The Beaver Creek Road Concept Plan adopted by the City Commission in September, 2008 includes mostly employment land, but has capacity for 1,023 new housing units in its residential areas.¹¹

Under the 2009-10 school boundary configurations, future residential development in the Park Place Concept Plan would be in the Redland Elementary and Ogden Middle School attendance areas, and future residential development in the Beaver Creek Road Concept Plan would be in the Beaver Creek Elementary and Ogden Middle School attendance areas. Large scale development is not expected to occur within the five year horizon of these forecasts, so the plans do not impact the district-wide or individual school forecasts.

Table 21 on the next page presents the enrollment forecasts for each school, grouped by school level. Profiles in the Appendix for each school include enrollment history and forecasts, school capacities, and housing development information for the school’s attendance area.

⁹From planning FAQ at <http://www.orcity.org/planning/frequently-asked-questions>.

¹⁰City of Oregon City, Park Place Concept plan, March, 2008.

¹¹City of Oregon City, Beaver Creek Road Concept plan, August, 2008.

Table 21
Enrollment Forecasts for Individual Schools, 2008-09 to 2013-14

School	Actual	Forecast					Change	
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2008-09 to 2013-14	
							Number	Percent
Beavercreek Elementary	462	471	457	454	454	471	9	1.9%
Candy Lane Elementary (3rd-6th)	267	262	261	260	264	249	-18	-6.7%
Gaffney Lane Elementary	574	564	564	564	545	565	-9	-1.6%
Holcomb Elementary	487	503	501	508	521	525	38	7.8%
Jennings Lodge Elementary (K-3rd)	293	283	278	276	280	291	-2	-0.7%
John McLoughlin Elementary	591	580	567	565	574	580	-11	-1.9%
King Elementary	406	390	375	369	362	366	-40	-9.9%
Mt. Pleasant Elementary	395	392	388	391	396	387	-8	-2.0%
Park Place Elementary*	268	254	251	241	238	242	-26	-9.7%
Redland Elementary	466	448	433	412	407	411	-55	-11.8%
Gardiner Middle School	557	573	607	585	580	558	1	0.2%
Ogden Middle School	638	632	659	676	653	610	-28	-4.4%
Oregon City High School	2,231	2,224	2,164	2,198	2,237	2,267	36	1.6%
District Totals	7,635	7,576	7,505	7,499	7,511	7,522	-113	-1.5%

*Park Place closing Summer 2009; students to be reassigned to Holcomb and Redland.

Actual Enrollment: Oregon City School District, September 30 quarterly report information.

Forecast: Population Research Center, Portland State University, May 2009.

FORECAST ERROR AND UNCERTAINTY

By exploring recent population, housing, and enrollment trends in the Oregon City School District, linking these trends and expectations of future demographic change in the forecast models, and producing the enrollment forecasts, we have completed a study that we believe will be useful for a variety of short and mid-range planning needs of the District.

The forecast includes positive net migration of students, at rates similar to the past five years. The contribution of migration occurs each year in the forecast. In reality, there will be cycles of faster and slower economic and population growth in the future which no forecast will be able to predict, so the year-to-year pattern of actual growth will deviate from the forecast.

Another uncertainty in the forecast involves the entry grades, kindergarten and 1st grade. The relationship between births and subsequent kindergarten and 1st grade enrollment five to six years later is affected by two factors – the migration of children during the years prior to enrolling in school, and the share of residents enrolling in District schools. Births peaked in 1996 to 1998, and a corresponding peak in kindergarten and 1st grade enrollments occurred between 2002 and 2004. Total enrollment in District kindergartens since 2005 has been lower in part due to the downturn in births. If future kindergarten classes are consistently lower than forecast, overall K-12 enrollment may fall short of the forecast. Conversely, if there are unexpected increases in kindergarten, they will influence District enrollment totals for years to come, since students have 13 years to progress through the system.

In general, forecast error varies according to the size of the population being forecast and the length of the forecast horizon. The smaller the population and the longer the forecast period, the larger the error is likely to be. In particular, the school level forecasts depend on assumptions about the distribution of housing and population growth in small areas

within the District over a five year period, so they should be used as only one of many tools in the planning process.

Due to the nature of forecasting, there is no way to estimate a confidence interval as one might for data collected from a survey. The best way to measure potential forecast error is to compare actual enrollments with previous forecasts that were conducted using similar data and methodologies. In Table 22, we compare the actual OCSD enrollment by grade level in Fall 2008 with previous 2008-09 forecasts. Table 23 compares enrollment forecasts for individual schools. The accuracy of the forecasts depends on which numbers are most important to the user. For example, total K-12 enrollment in the District was only 39 students different from what was forecast last year — an error of about five tenths of one percent. Forecasts for individual schools varied from 40 students too low (Beavercreek) to perfect (Mt. Pleasant) to 21 students too high (Redland). As a measure of average error for grade levels and for individual school enrollments, we have included the mean absolute percent error (MAPE) in the tables.

Table 22
Fall 2008 Enrollment Compared to Previous Forecasts
By Grade Level

Grade	Actual	One year forecast ¹			Two year forecast ²		
		Fcst.	Diff.	Error	Fcst.	Diff.	Error
K	545	533	-12	-2.2%	552	7	1.3%
1	570	556	-14	-2.5%	558	-12	-2.1%
2	559	578	19	3.4%	564	5	0.9%
3	606	599	-7	-1.2%	580	-26	-4.3%
4	635	646	11	1.7%	627	-8	-1.3%
5	646	656	10	1.5%	652	6	0.9%
6	648	658	10	1.5%	671	23	3.5%
7	573	627	54	9.4%	635	62	10.8%
8	622	628	6	1.0%	603	-19	-3.1%
9	592	592	0	0.0%	610	18	3.0%
10	577	578	1	0.2%	580	3	0.5%
11	535	511	-24	-4.5%	512	-23	-4.3%
12	527	512	-15	-2.8%	510	-17	-3.2%
Total	7,635	7,674	39	0.5%	7,654	19	0.2%
MAPE³		2.5%			3.0%		

1. Forecast for 2008-09 by PSU-PRC, baseline 2007-08 enrollment, March 2008
2. Forecast for 2008-09 by PSU-PRC, baseline 2006-07 enrollment, April 2007
3. Mean absolute percent error for individual grades K-12.

Table 23
Fall 2008 Enrollment Compared to Previous Forecasts
By Individual School

School	Actual	One year forecast ¹			Two year forecast ²		
		Fcst.	Diff.	Error	Fcst.	Diff.	Error
Beavercreek	462	422	-40	-8.7%	505	43	9.3%
Candy Lane (3rd-6th)	267	256	-11	-4.1%	245	-22	-8.2%
Gaffney Lane	574	585	11	1.9%	602	28	4.9%
Holcomb	487	473	-14	-2.9%	427	-60	-12.3%
Jennings Lodge (H)	293	313	20	6.8%	287	-6	-2.0%
John McLoughlin	591	582	-9	-1.5%	621	30	5.1%
King	406	426	20	4.9%	382	-24	-5.9%
Mt. Pleasant	395	395	0	0.0%	389	-6	-1.5%
Park Place	268	287	19	7.1%	246	-22	-8.2%
Redland	466	487	21	4.5%	500	34	7.3%
Elementaries	4,209	4,226	17	0.4%	4,204	-5	-0.1%
Gardiner	557	588	31	5.6%	595	38	6.8%
Ogden	638	667	29	4.5%	643	5	0.8%
Middle Schools	1,195	1,255	60	5.0%	1,238	43	3.6%
Oregon City HS	2,231	2,193	-38	-1.7%	2,212	-19	-0.9%
District	7,635	7,674	39	0.5%	7,654	19	0.2%
MAPE³			4.2%				5.6%

1. Forecast for 2008-09 by PSU-PRC, baseline 2007-08 enrollment, March 2008

2. Forecast for 2008-09 by PSU-PRC, baseline 2006-07 enrollment, April 2007

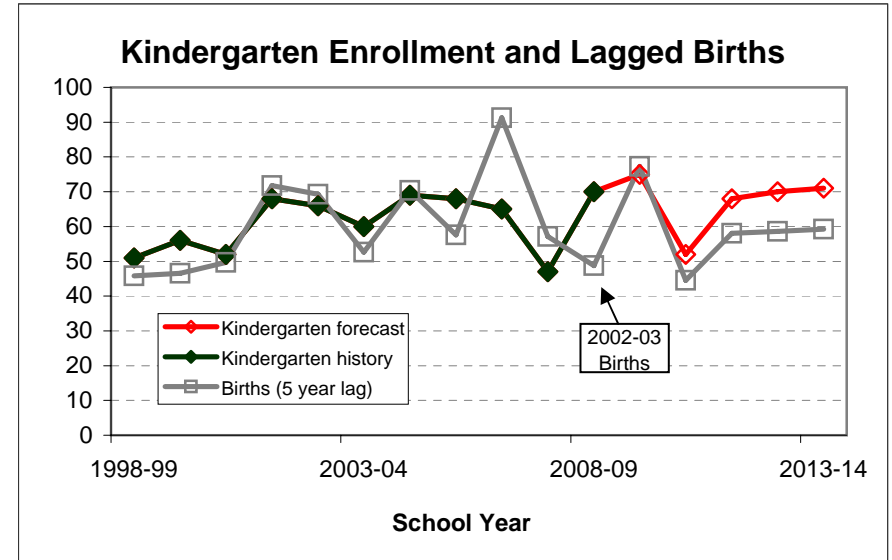
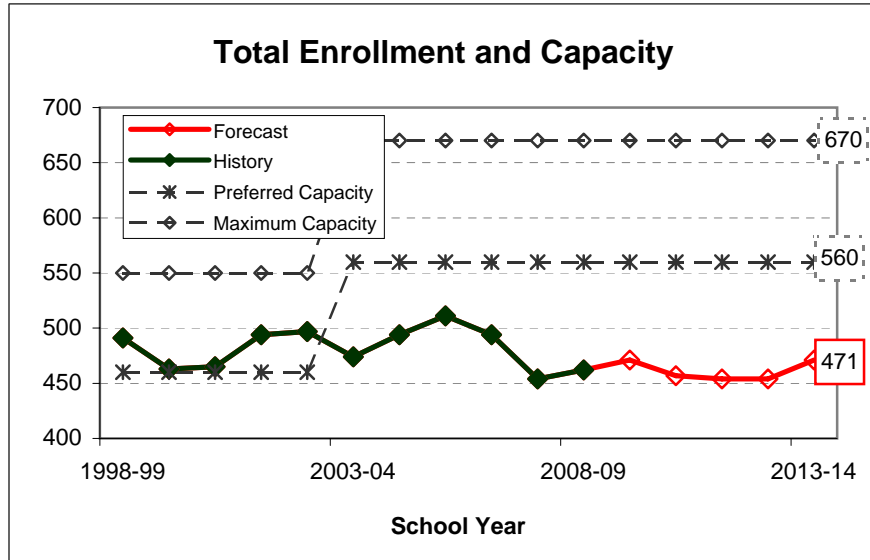
3. Mean absolute percent error for individual schools.

Because of the uncertainties of forecasts described in this section, it is important to monitor the results and update the forecast as new information becomes available. New information may be school enrollment data, new census data, proposals for major new housing development, or land use changes that may result in housing or economic growth that differs significantly from recent and current trends.

APPENDIX

POPULATION, HOUSING, AND ENROLLMENT PROFILES FOR INDIVIDUAL SCHOOLS

Beavercreek Elementary School -- Population, Housing, and Enrollment Profile



Note: Preferred capacity employs a standard classroom multiplier of 25 students. Maximum capacity uses a standard classroom multiplier of 30. Adjustments are made for special education where needed.

1990 and 2000 Census Data

2008-09 attendance area boundaries

	1990	2000	'90-'00 Change	
			Number	Percent
Total Population	3,942	5,980	2,038	52%
Population Under Age 5	285	437	152	53%
Population Age 5 to 17	850	1,197	347	41%
Housing Units	1,322	2,188	866	66%
Households	1,290	2,081	791	61%
with children under 18	586	849	263	45%

Enrollment History and Forecast

	History			Forecast
	1998-99	2003-04	2008-09	2013-14
Total enrollment	491	474	462	471
Five Year Change		-17	-12	9

New Housing Development

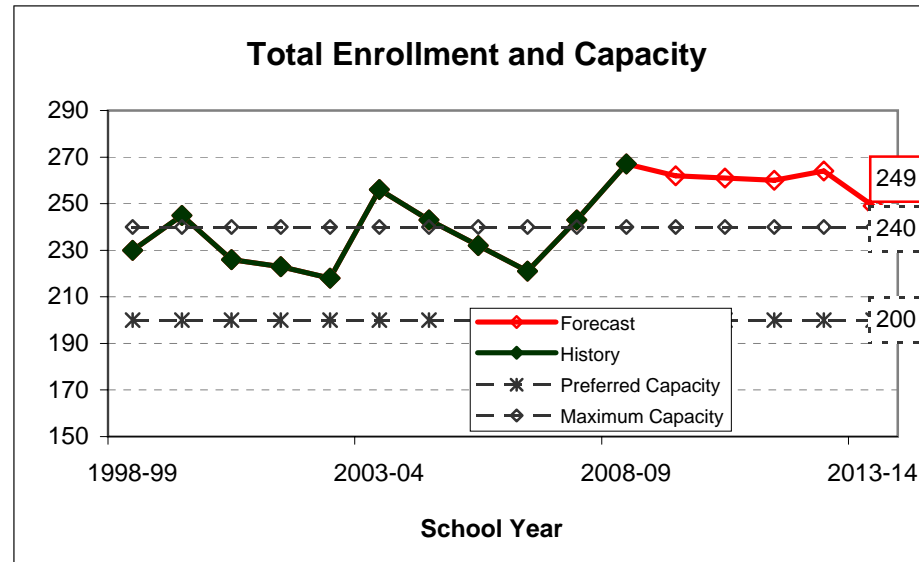
Number of single family units built 2000 to 2007 ¹: 391

Potential housing units in developments approved 2005 to 2008 ²: 459

1. Based on Clackamas County tax lot attribute data, January 2009.

2. Based on land use applications submitted 2005-2008. These homes may have already been completed, are now under construction, or have yet to be built.

Candy Lane Elementary School -- Population, Housing, and Enrollment Profile



Note: Preferred Capacity employs a standard classroom multiplier of 25 students. Maximum Capacity uses a standard classroom multiplier of 30. Adjustments are made for special education as needed.

1990 and 2000 Census Data 2008-09 attendance area boundaries

	1990	2000	'90-'00 Change	
			Number	Percent
Total Population	4,357	5,194	837	19%
Population Under Age 5	352	393	41	12%
Population Age 5 to 17	826	978	152	18%
Housing Units	1,681	2,166	485	29%
Households	1,630	2,065	435	27%
with children under 18	671	730	59	9%

Enrollment History and Forecast

	History			Forecast
	1998-99	2003-04	2008-09	2013-14
Total enrollment	230	256	267	249
Five Year Change		26	11	-18

Note: In 2002, a special education class moved from Candy Lane to Gaffney Lane.

New Housing Development

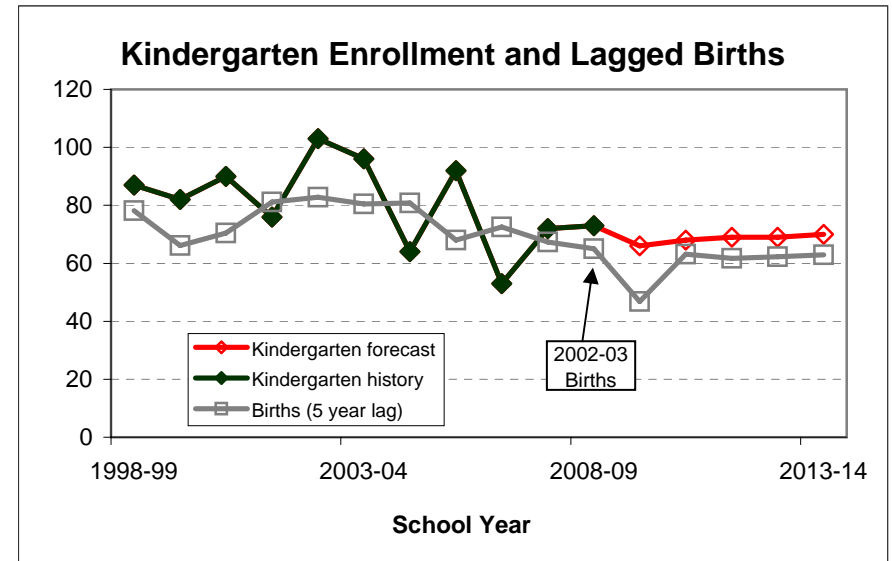
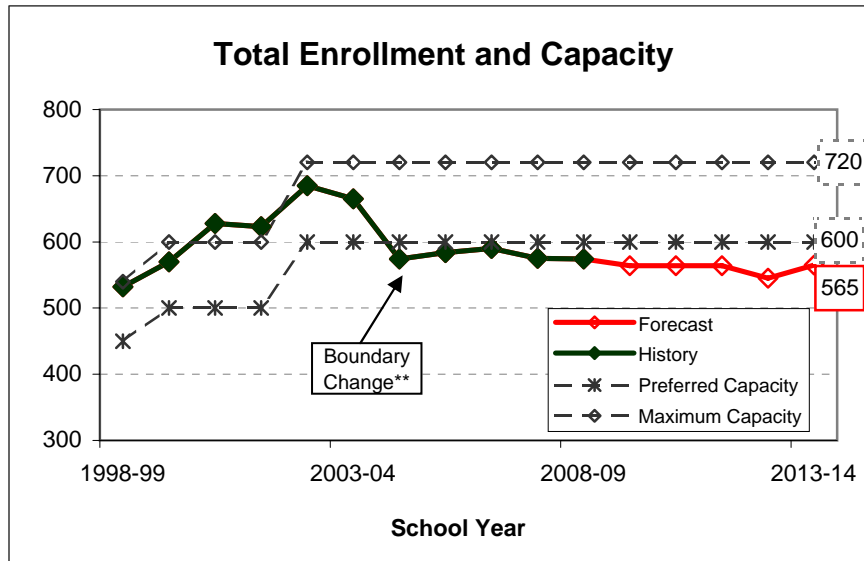
Number of single family units built 2000 to 2007¹: 203

Potential housing units in developments approved 2005 to 2008²: 72

1. Based on Clackamas County tax lot attribute data, January 2009.

2. Based on land use applications submitted 2005-2008. These homes may have already been completed, are now under construction, or have yet to be built.

Gaffney Lane Elementary School -- Population, Housing, and Enrollment Profile



Note: Preferred capacity employs a standard classroom multiplier of 25 students. Maximum capacity uses a standard classroom multiplier of 30. Adjustments are made for special education as needed. ** In 2004, a boundary change sent some students to Mount Pleasant.

1990 and 2000 Census Data

2008-09 attendance area boundaries

	1990	2000	'90-'00 Change	
			Number	Percent
Total Population	4,090	6,611	2,521	62%
Population Under Age 5	309	524	215	70%
Population Age 5 to 17	908	1,150	242	27%
Housing Units	1,446	2,540	1,094	76%
Households	1,418	2,329	911	64%
with children under 18	629	898	269	43%

Enrollment History and Forecast

	History			Forecast
	1998-99	2003-04	2008-09	2013-14
Total enrollment	532	665	574	565
Five Year Change		133	-91	-9

Notes: In 2002, Gaffney Lane added a special education class. In 2004, a boundary change sent some students from Gaffney Lane to Mt. Pleasant.

New Housing Development

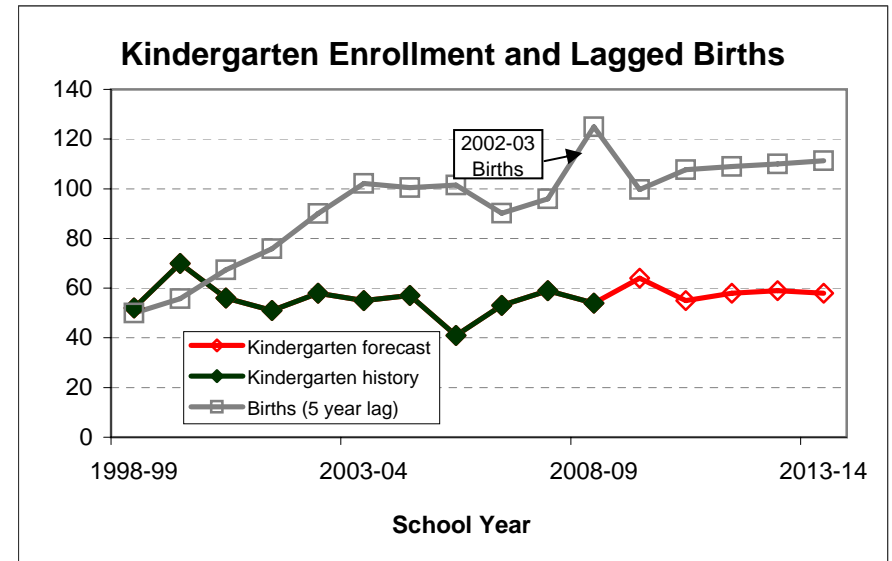
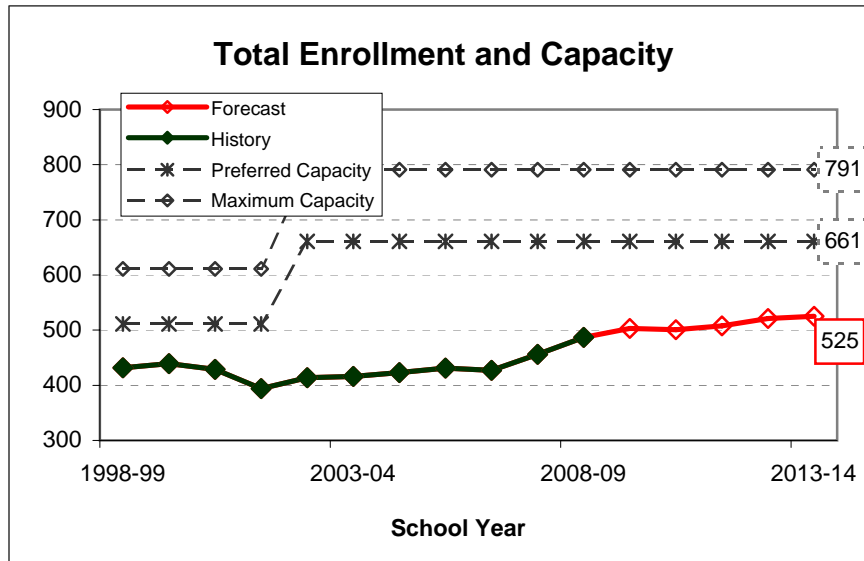
Number of single family units built 2000 to 2007 ¹: 277

Potential housing units in developments approved 2005 to 2008 ²: 116

1. Based on Clackamas County tax lot attribute data, January 2009.

2. Based on land use applications submitted 2005-2008. These homes may have already been completed, are now under construction, or have yet to be built.

Holcomb Elementary School -- Population, Housing, and Enrollment Profile



Note: Preferred capacity employs a standard classroom multiplier of 25 students. Maximum capacity uses a standard classroom multiplier of 30. Adjustments are made for special education as needed. Additional students from Park Place Elementary closure have not been added to the forecasts.

1990 and 2000 Census Data

2008-09 attendance area boundaries

	1990	2000	'90-'00 Change	
			Number	Percent
Total Population	5,594	5,803	209	4%
Population Under Age 5	429	367	-62	-14%
Population Age 5 to 17	1,136	1,077	-59	-5%
Housing Units	2,035	2,339	304	15%
Households	1,971	2,200	229	12%
with children under 18	799	775	-24	-3%

Enrollment History and Forecast

	History			Forecast
	1998-99	2003-04	2008-09	2013-14
Total enrollment	432	416	487	525
Five Year Change		-16	71	38

New Housing Development

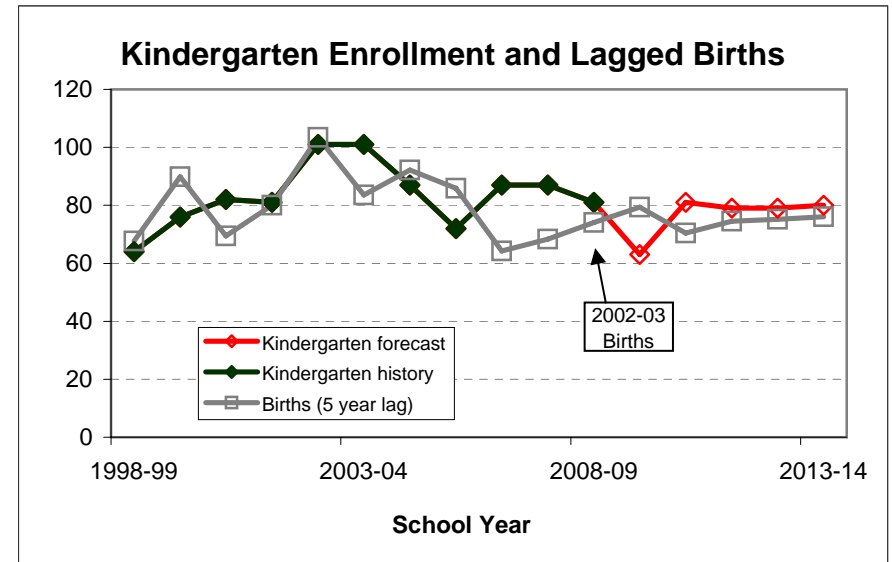
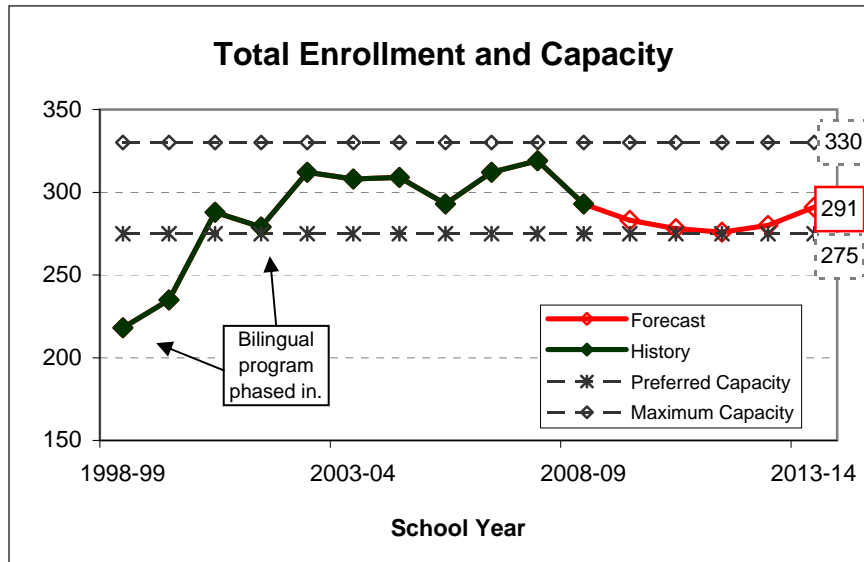
Number of single family units built 2000 to 2007 ¹: 318

Potential housing units in developments approved 2005 to 2008 ²: 74

1. Based on Clackamas County tax lot attribute data, January 2009.

2. Based on land use applications submitted 2005-2008. These homes may have already been completed, are now under construction, or have yet to be built.

Jennings Lodge Elementary School -- Population, Housing, and Enrollment Profile



Note: Preferred capacity employs a standard classroom multiplier of 25 students. Maximum capacity uses a standard classroom multiplier of 30. Adjustments are made for special education as needed.

1990 and 2000 Census Data

2008-09 attendance area boundaries

	1990	2000	'90-'00 Change	
			Number	Percent
Total Population	4,357	5,194	837	19%
Population Under Age 5	352	393	41	12%
Population Age 5 to 17	826	978	152	18%
Housing Units	1,681	2,166	485	29%
Households	1,630	2,065	435	27%
with children under 18	671	730	59	9%

Enrollment History and Forecast

	History			Forecast
	1998-99	2003-04	2008-09	2013-14
Total enrollment	218	308	293	291
Five Year Change		90	-15	-2

New Housing Development

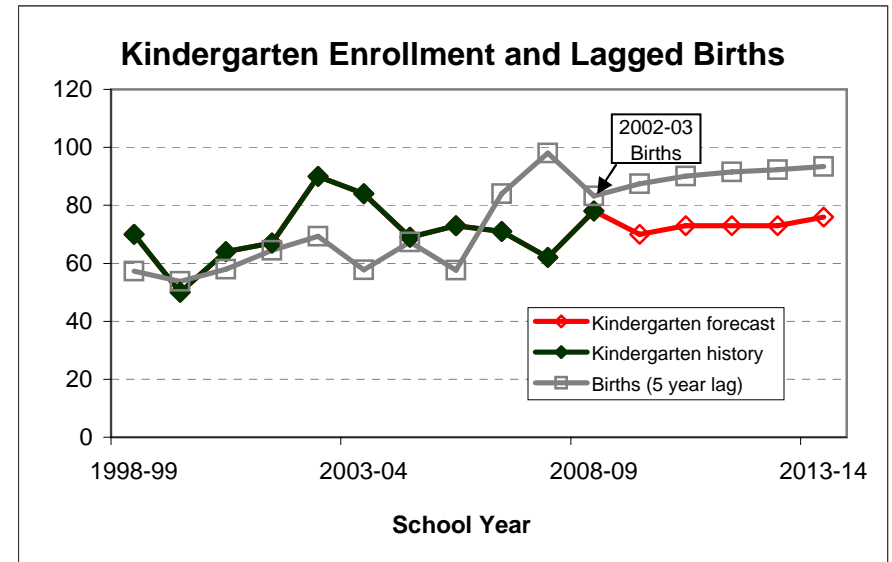
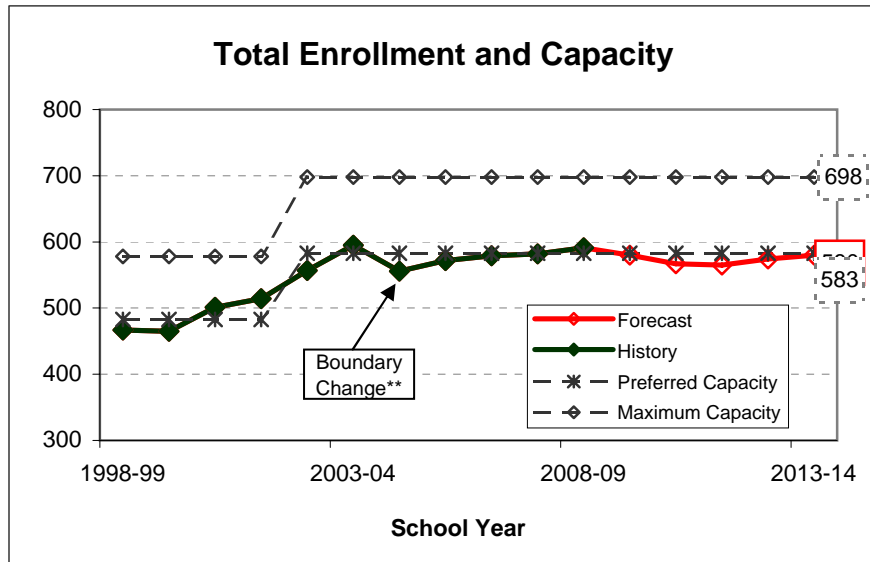
Number of single family units built 2000 to 2007 ¹: 203

Potential housing units in developments approved 2005 to 2008 ²: 72

1. Based on Clackamas County tax lot attribute data, January 2009.

2. Based on land use applications submitted 2005-2008. These homes may have already been completed, are now under construction, or have yet to be built.

John McLoughlin Elementary School -- Population, Housing, and Enrollment Profile



Note: Preferred capacity employs a standard classroom multiplier of 25 students. Maximum capacity uses a standard classroom multiplier of 30. Adjustments are made for special education as needed. ** In 2004, a boundary change sent some students to King.

1990 and 2000 Census Data

2008-09 attendance area boundaries

	1990	2000	'90-'00 Change	
			Number	Percent
Total Population	3,308	5,492	2,184	66%
Population Under Age 5	217	385	168	77%
Population Age 5 to 17	770	1,073	303	39%
Housing Units	1,117	2,025	908	81%
Households	1,094	1,948	854	78%
with children under 18	500	771	271	54%

Enrollment History and Forecast

	History			Forecast
	1998-99	2003-04	2008-09	2013-14
Total enrollment	467	595	591	580
Five Year Change		128	-4	-11

Note: In 2004, a boundary change sent some students from McLoughlin to King.

New Housing Development

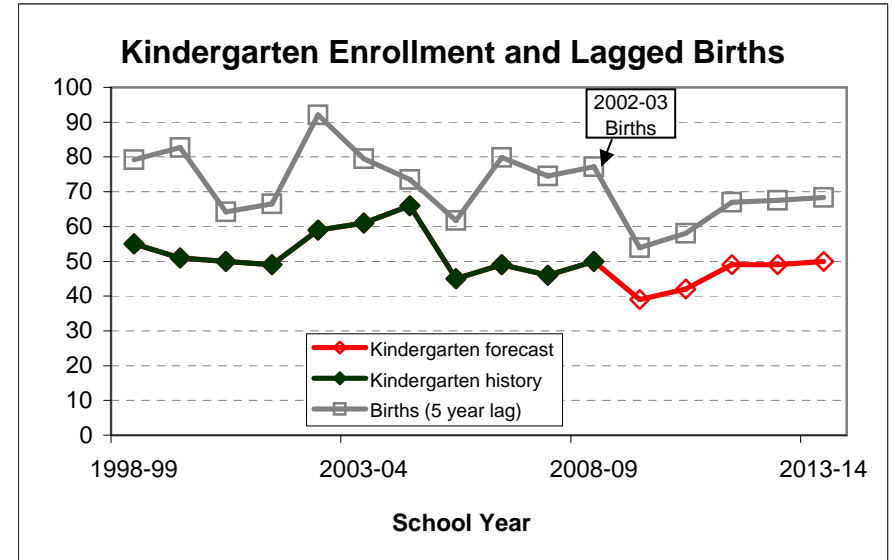
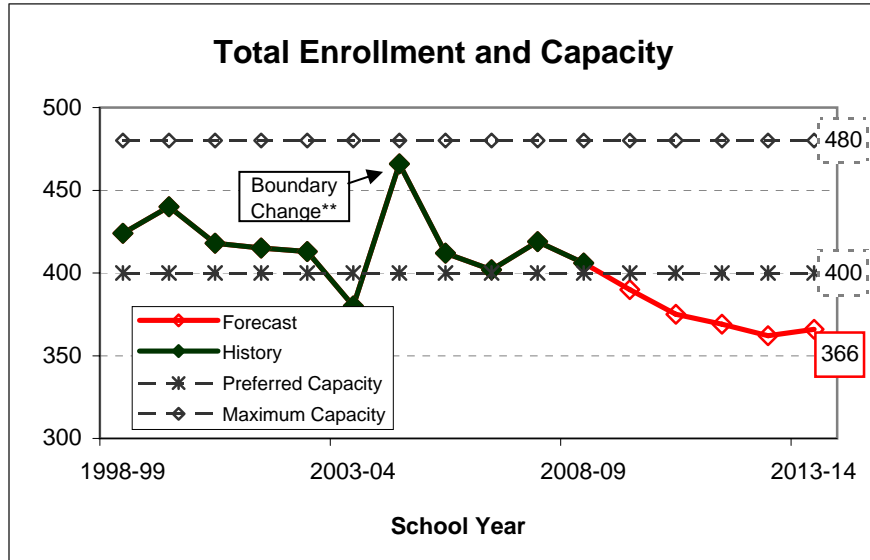
Number of single family units built 2000 to 2007 ¹: 932

Potential housing units in developments approved 2005 to 2008 ²: 323

1. Based on Clackamas County tax lot attribute data, January 2009.

2. Based on land use applications submitted 2005-2008. These homes may have already been completed, are now under construction, or have yet to be built.

King Elementary School -- Population, Housing, and Enrollment Profile



Note: Preferred capacity employs a standard classroom multiplier of 25 students. Maximum capacity uses a standard classroom multiplier of 30. Adjustments are made for special education as needed. ** In 2004, a boundary change added some students from John McLoughlin.

1990 and 2000 Census Data

2008-09 attendance area boundaries

	1990	2000	'90-'00 Change	
			Number	Percent
Total Population	4,454	4,220	-234	-5%
Population Under Age 5	406	359	-47	-12%
Population Age 5 to 17	853	764	-89	-10%
Housing Units	1,768	1,742	-26	-1%
Households	1,701	1,653	-48	-3%
with children under 18	700	619	-81	-12%

Enrollment History and Forecast

	History			Forecast
	1998-99	2003-04	2008-09	2013-14
Total enrollment	424	380	406	366
Five Year Change		-44	26	-40

Note: In 2004, a boundary change sent some students from McLoughlin to King.

New Housing Development

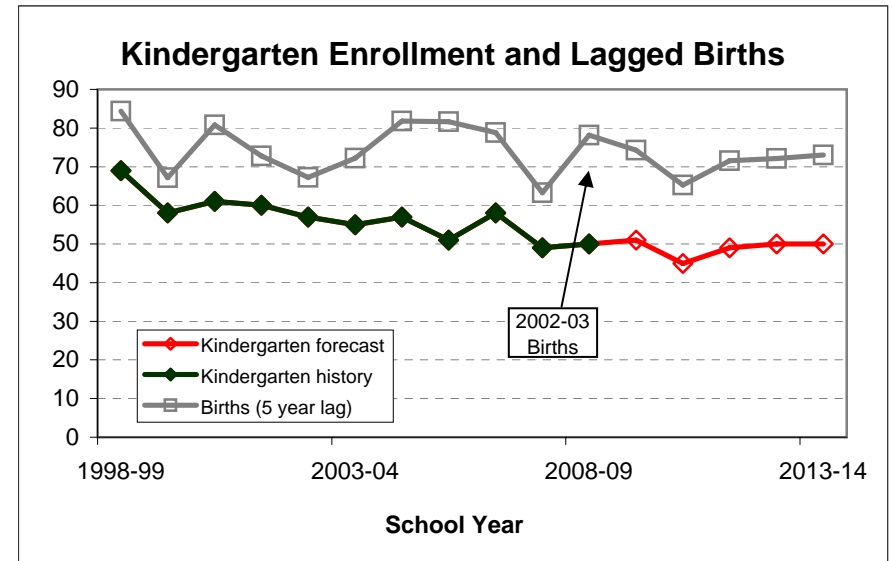
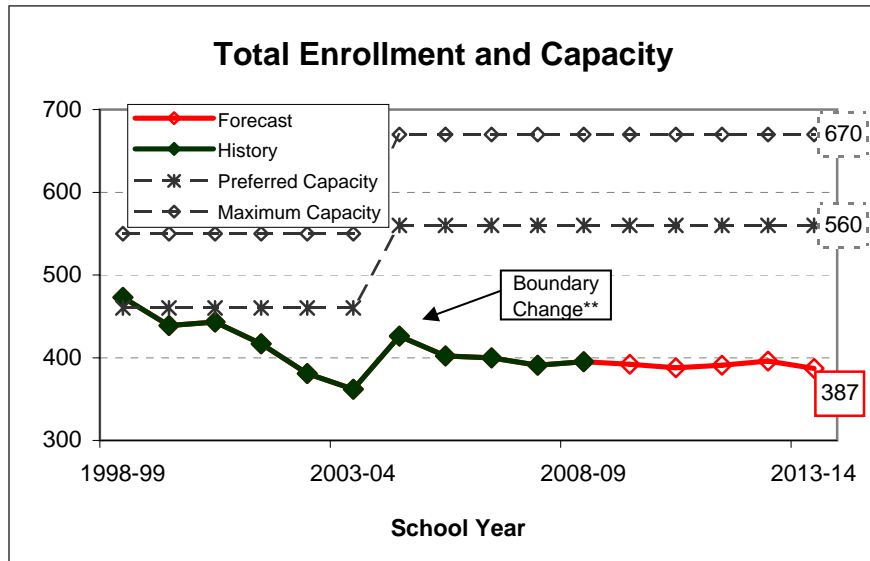
Number of single family units built 2000 to 2007 ¹: 52

Potential housing units in developments approved 2005 to 2008 ²: 38

1. Based on Clackamas County tax lot attribute data, January 2009.

2. Based on land use applications submitted 2005-2008. These homes may have already been completed, are now under construction, or have yet to be built.

Mt. Pleasant Elementary School -- Population, Housing, and Enrollment Profile



Note: Preferred capacity employs a standard classroom multiplier of 25 students. Maximum capacity uses a standard classroom multiplier of 30. Adjustments are made for special education as needed. ** In 2004, a boundary change added some students from Gaffney Lane.

1990 and 2000 Census Data

2008-09 attendance area boundaries

	1990	2000	'90-'00 Change	
			Number	Percent
Total Population	3,733	4,442	709	19%
Population Under Age 5	309	370	61	20%
Population Age 5 to 17	735	876	141	19%
Housing Units	1,376	1,706	330	24%
Households	1,333	1,632	299	22%
with children under 18	558	691	133	24%

Enrollment History and Forecast

	History			Forecast
	1998-99	2003-04	2008-09	2013-14
Total enrollment	473	362	395	387
Five Year Change		-111	33	-8

Note: In 2004, a boundary change sent some students from Gaffney Lane to Mt. Pleasant.

New Housing Development

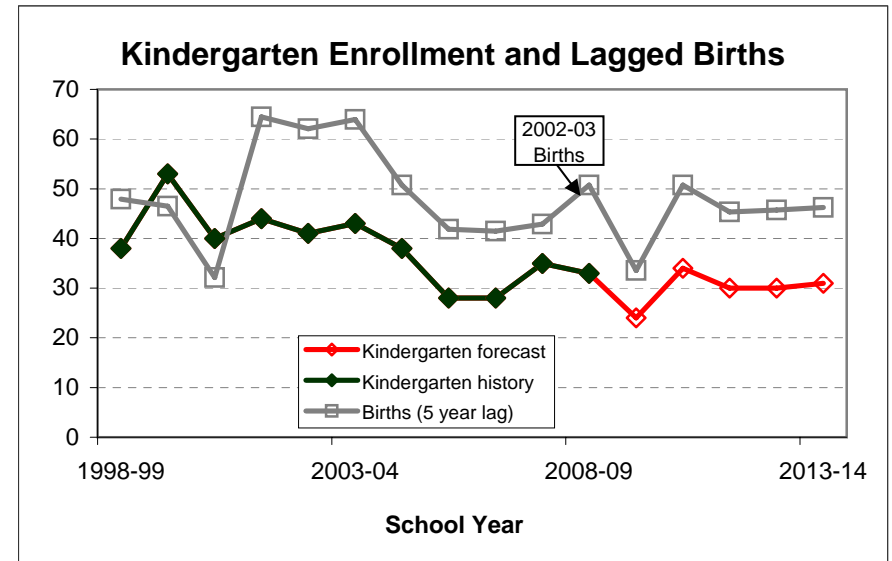
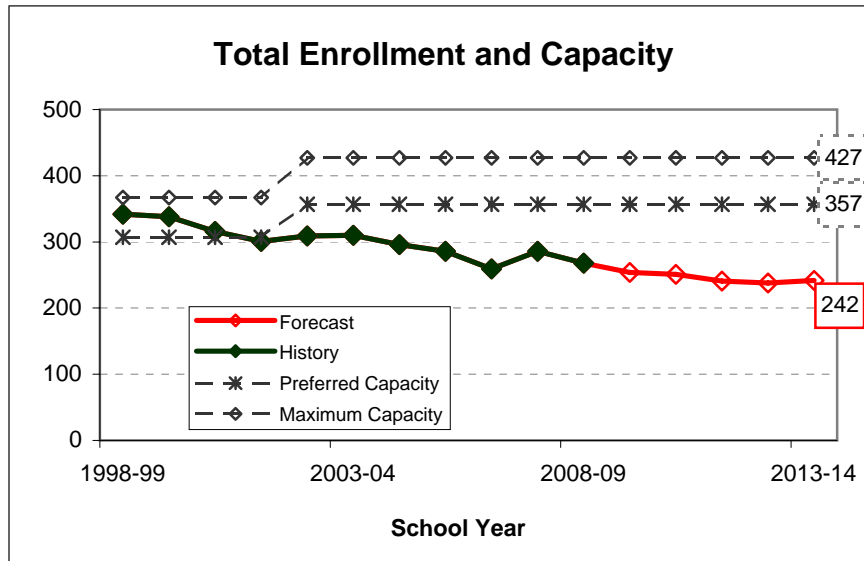
Number of single family units built 2000 to 2007 ¹: 64

Potential housing units in developments approved 2005 to 2008 ²: 106

1. Based on Clackamas County tax lot attribute data, January 2009.

2. Based on land use applications submitted 2005-2008. These homes may have already been completed, are now under construction, or have yet to be built.

Park Place Elementary School -- Population, Housing, and Enrollment Profile



Note: Preferred capacity employs a standard classroom multiplier of 25 students. Maximum capacity uses a standard classroom multiplier of 30. Adjustments are made for special education as needed. Park Place Elementary will close in the Summer of 2009; students will attend Holcomb or Redland.

1990 and 2000 Census Data

2008-09 attendance area boundaries

	1990	2000	'90-'00 Change	
			Number	Percent
Total Population	2,983	3,625	642	22%
Population Under Age 5	256	271	15	6%
Population Age 5 to 17	602	701	99	16%
Housing Units	1,084	1,391	307	28%
Households	1,060	1,337	277	26%
with children under 18	454	515	61	13%

Enrollment History and Forecast

	History			Forecast
	1998-99	2003-04	2008-09	2013-14
Total enrollment	342	310	268	242
Five Year Change		-32	-42	-26

New Housing Development

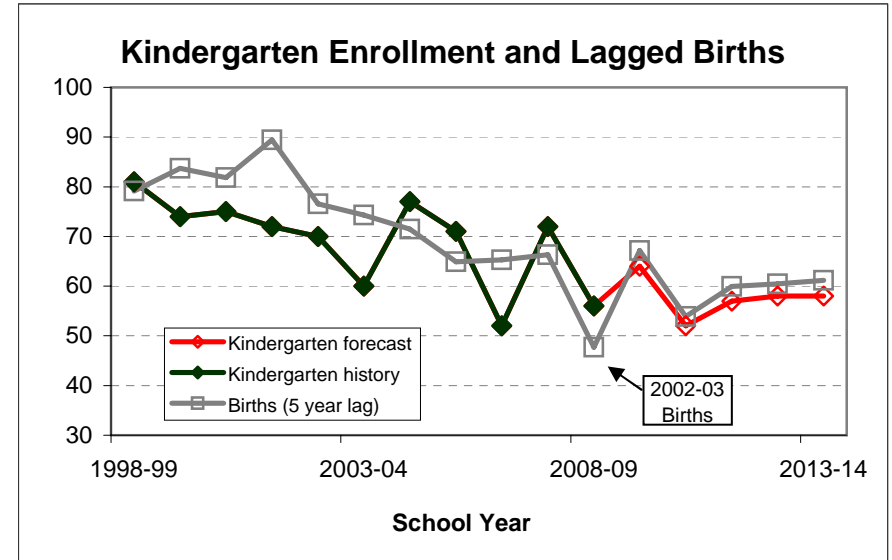
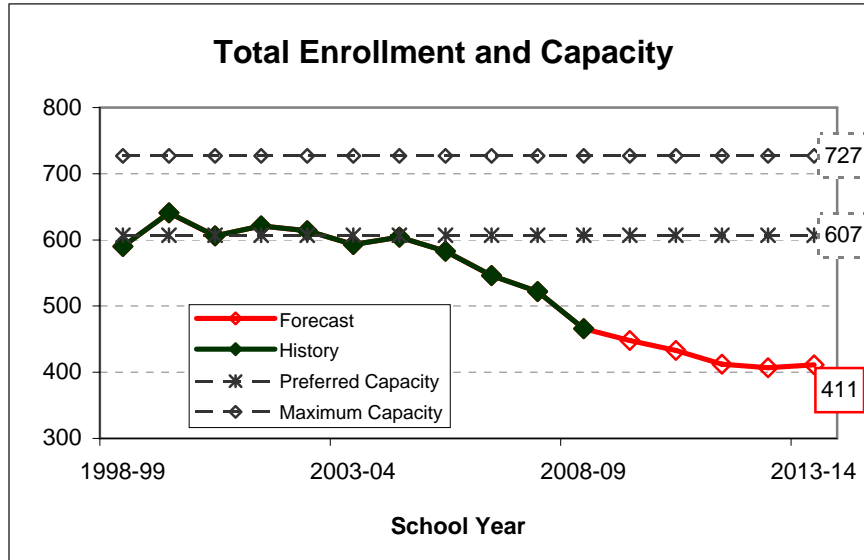
Number of single family units built 2000 to 2007 ¹: 176

Potential housing units in developments approved 2005 to 2008 ²: 176

1. Based on Clackamas County tax lot attribute data, January 2009.

2. Based on land use applications submitted 2005-2008. These homes may have already been completed, are now under construction, or have yet to be built.

Redland Elementary School -- Population, Housing, and Enrollment Profile



Note: Preferred capacity employs a standard classroom multiplier of 25 students. Maximum capacity uses a standard classroom multiplier of 30. Adjustments are made for special education as needed. Additional students from Park Place Elementary closure have not been added to the forecasts.

1990 and 2000 Census Data

2008-09 attendance area boundaries

	1990	2000	'90-'00 Change	
			Number	Percent
Total Population	6,447	6,800	353	5%
Population Under Age 5	406	379	-27	-7%
Population Age 5 to 17	1,468	1,367	-101	-7%
Housing Units	2,213	2,491	278	13%
Households	2,159	2,418	259	12%
with children under 18	968	891	-77	-8%

Enrollment History and Forecast

	History			Forecast
	1998-99	2003-04	2008-09	2013-14
Total enrollment	590	593	466	411
Five Year Change		3	-127	-55

New Housing Development

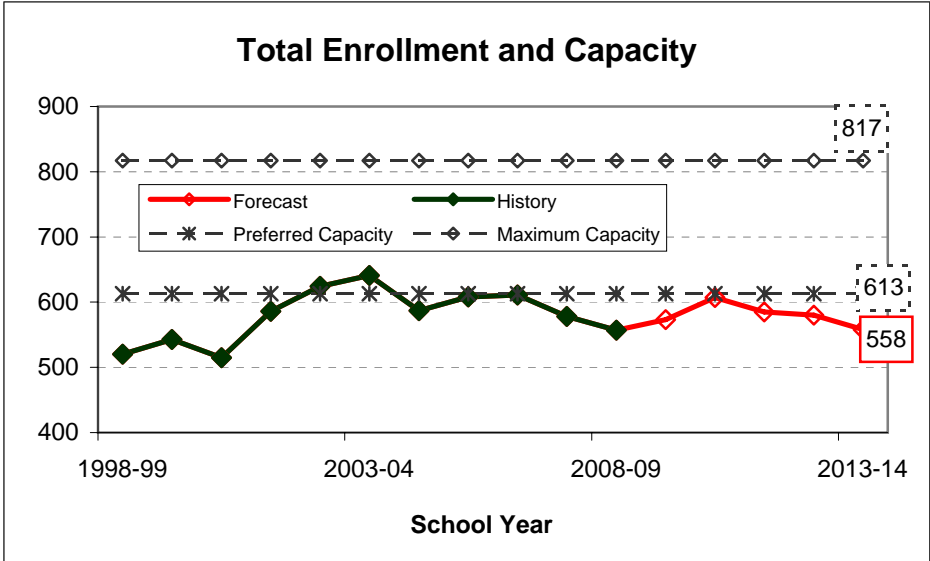
Number of single family units built 2000 to 2007 ¹: 351

Potential housing units in developments approved 2005 to 2008 ²: 103

1. Based on Clackamas County tax lot attribute data, January 2009.

2. Based on land use applications submitted 2005-2008. These homes may have already been completed, are now under construction, or have yet to be built.

Gardiner Middle School -- Population, Housing, and Enrollment Profile



Note: Preferred Capacity employs a standard classroom multiplier of 25 students. Maximum Capacity uses a standard classroom multiplier of 30. Adjustments are made for Special Education and middle school scheduling.

1990 and 2000 Census Data

2008-09 attendance area boundaries

	1990	2000	'90-'00 Change	
			Number	Percent
Total Population	15,585	20,765	5,180	33%
Population Under Age 5	1,241	1,638	397	32%
Population Age 5 to 17	3,266	3,863	597	18%
Housing Units	5,707	8,013	2,306	40%
Households	5,546	7,562	2,016	36%
with children under 18	2,387	2,979	592	25%

Enrollment History and Forecast

	History			Forecast
	1998-99	2003-04	2008-09	2013-14
Total enrollment	520	641	557	558
Five Year Change		121	-84	1

New Housing Development

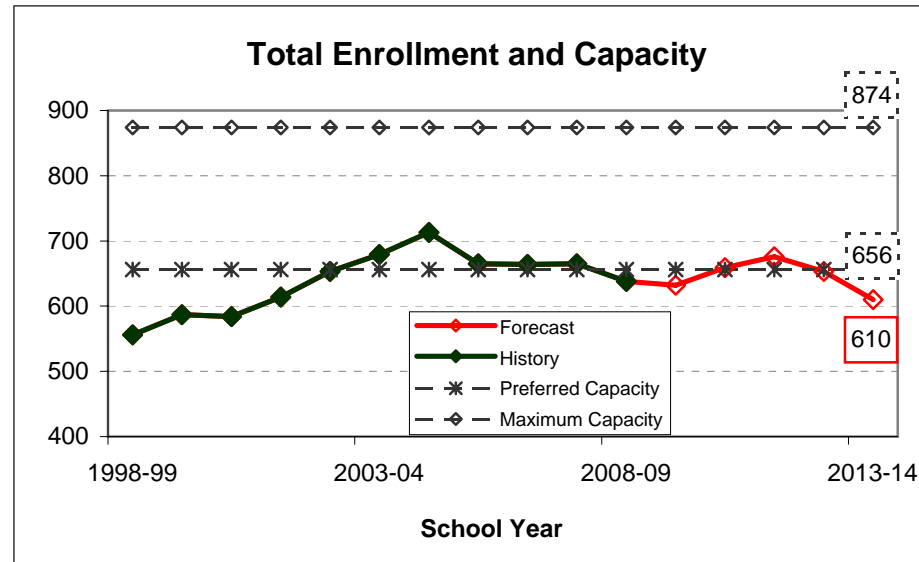
Number of single family units built 2000 to 2007 ¹: 1325

Potential housing units in developments approved 2005 to 2008 ²: 583

1. Based on Clackamas County tax lot attribute data, January 2009.

2. Based on land use applications submitted 2005-2008. These homes may have already been completed, are now under construction, or have yet to be built.

Ogden Middle School -- Population, Housing, and Enrollment Profile



Note: Preferred Capacity employs a standard classroom multiplier of 25 students. Maximum Capacity uses a standard classroom multiplier of 30. Adjustments are made for Special Education and middle school scheduling.

1990 and 2000 Census Data

2008-09 attendance area boundaries

	1990	2000	'90-'00 Change	
			Number	Percent
Total Population	23,323	27,402	4,079	17%
Population Under Age 5	1,728	1,847	119	7%
Population Age 5 to 17	4,882	5,320	438	9%
Housing Units	8,335	10,575	2,240	27%
Households	8,110	10,101	1,991	25%
with children under 18	3,478	3,760	282	8%

Enrollment History and Forecast

	History			Forecast
	1998-99	2003-04	2008-09	2013-14
Total enrollment	556	679	638	610
Five Year Change		123	-41	-28

New Housing Development

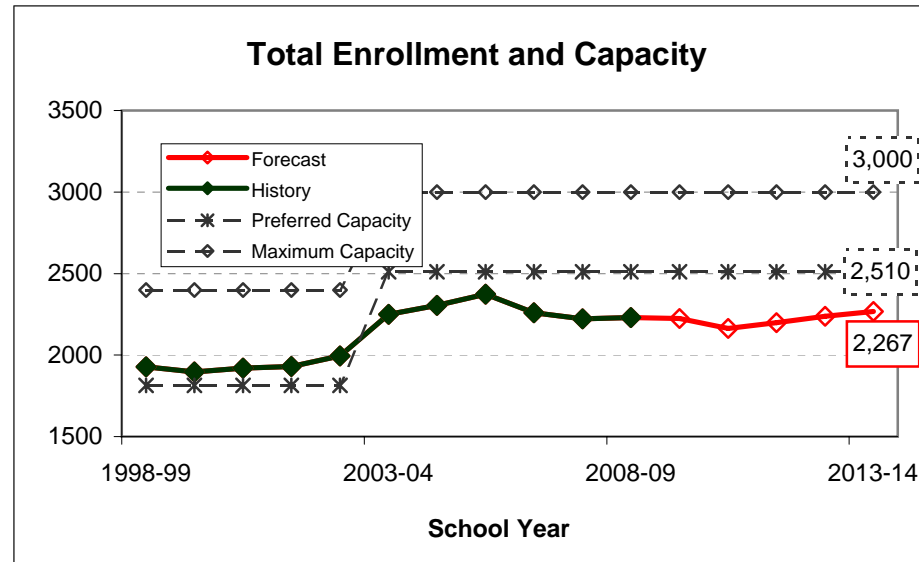
Number of single family units built 2000 to 2007 ¹: 1439

Potential housing units in developments approved 2005 to 2008 ²: 884

1. Based on Clackamas County tax lot attribute data, January 2009.

2. Based on land use applications submitted 2005-2008. These homes may have already been completed, are now under construction, or have yet to be built.

Oregon City High School -- Population, Housing, and Enrollment Profile



Note: Preferred Capacity employs a standard classroom multiplier of 25 students. Maximum Capacity uses a standard classroom multiplier of 30. Adjustments are made for Special Education and middle school scheduling.

1990 and 2000 Census Data

2008-09 attendance area boundaries

	1990	2000	'90-'00 Change	
			Number	Percent
Total Population	38,908	48,167	9,259	24%
Population Under Age 5	2,969	3,485	516	17%
Population Age 5 to 17	8,148	9,183	1,035	13%
Housing Units	14,042	18,588	4,546	32%
Households	13,656	17,663	4,007	29%
with children under 18	5,865	6,739	874	15%

Enrollment History and Forecast

	History			Forecast
	1998-99	2003-04	2008-09	2013-14
Total enrollment	1927	2249	2231	2267
Five Year Change		322	-18	36

New Housing Development

Number of single family units built 2000 to 2007¹: 2764

Potential housing units in developments approved 2005 to 2008²: 1467

1. Based on Clackamas County tax lot attribute data, January 2009.

2. Based on land use applications submitted 2005-2008. These homes may have already been completed, are now under construction, or have yet to be built.